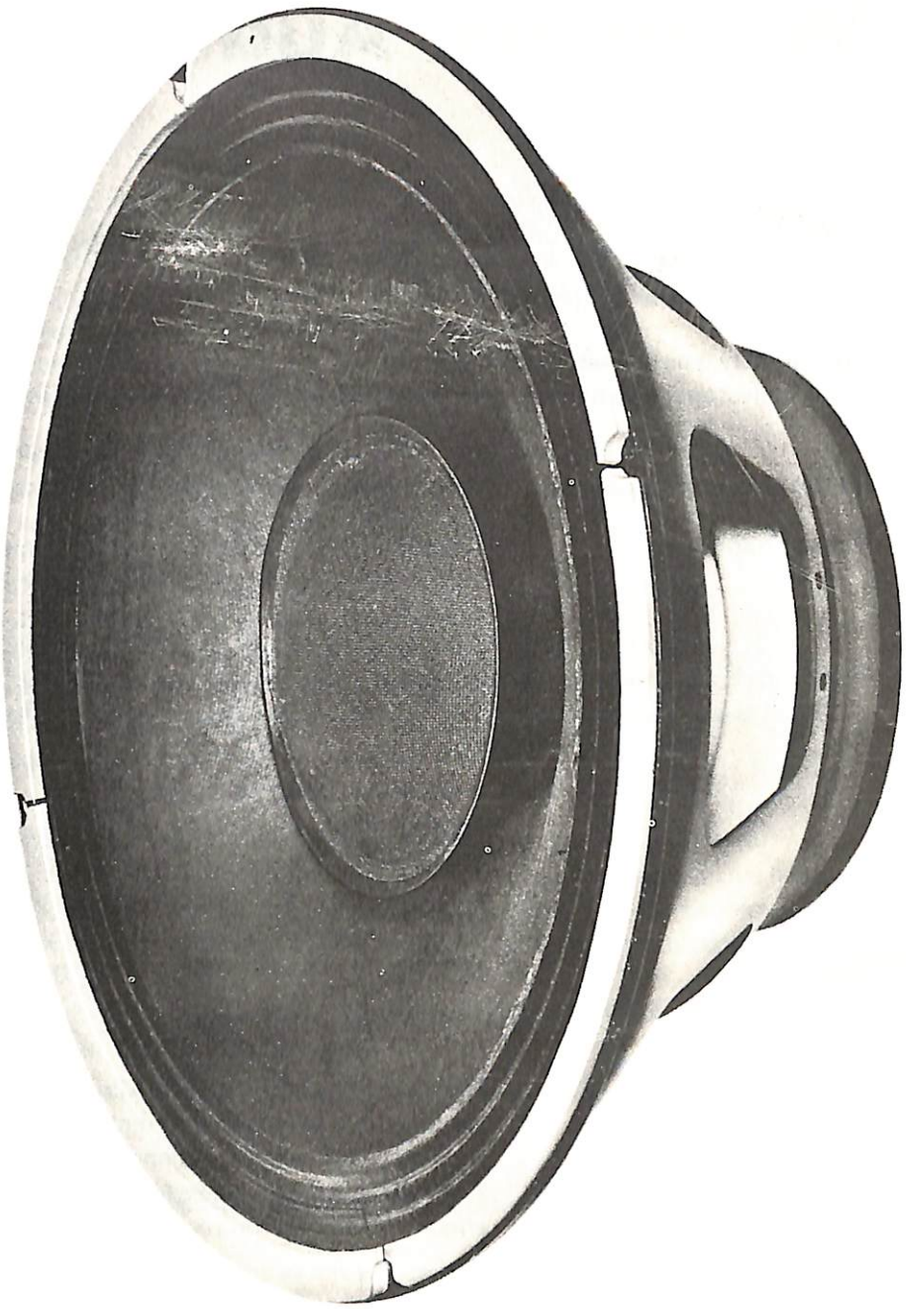

Wilmslow Audio

BAKER
CELESTION
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S.T.C.
WHARFEDALE

The firm for loudspeakers

Wilmslow Audio

One of the problems of selling technical products to a largely non-technical clientele is to give the customer sufficient information in a concise form to enable him to choose the most suitable type for his purpose. This booklet is our attempt to do that.

We sell every type of loudspeaker, from an inexpensive unit for a schoolboy's first attempt at radio construction to the largest and most powerful Public Address and Discotheque speakers.

First, a few general principles:

Power handling:

Watts RMS (Root Mean Square) the normal British method of measurement.
Watts Peak or Watts U.S.A., double the RMS value.
Watts Music Power or IHFM (American Institute of HiFi Manufacturers) 1 $\frac{1}{2}$ times RMS value – so – the same speaker could be rated as 10 watts RMS, 20 watts peak, or 15 watts IHFM or music power.
For Public Address choose a speaker to handle 1 $\frac{1}{2}$ times the output of the amplifier, for Bass Guitar or Pop Organ, etc. the speaker should be capable of handling twice the output of the amplifier.
For HiFi purposes, choose speakers equal in power handling to the output of the amplifier. Smaller speakers *may* be used but the volume must not be turned up to the point where distortion occurs or the speakers may be damaged.
(N.B. A Japanese "100 watt stereo amplifier" has an output of 50 watts IHFM per channel but British manufacturers usually state the RMS per channel value.)

Impedance:

Many modern amplifiers have a fairly wide tolerance of the impedance of the speaker used, so long as the amplifier is not operated near maximum output. However, the correct impedance of speaker will give optimum quality and volume. The impedance of speakers in series is additive: speakers in parallel offer an effective impedance in accordance with this formula:

$$\frac{\text{Impedance A} \times \text{Impedance B}}{\text{Impedance A} + \text{Impedance B}}$$

– if using two speakers of similar impedance this means that the impedance is halved – two 8 ohm units in parallel equals 4 ohms total.
This should be borne in mind if connecting a second pair of speakers to a HiFi amplifier, many of which have second speaker outlets, to ensure that the combined impedance offered to the amplifier is not too low.
Often the second speakers, sited in another room, are smaller (and less expensive!) than the main HiFi speakers and it is sometimes useful to choose a higher impedance for these which reduces the amount of power they have to dissipate.
If your main speakers are of 4 ohms impedance then, say, 8 ohm extra speakers would be suitable.
(See Stephenspeaker Stereocube for "extra speakers".)

Bass Resonance:

In general terms, the bass resonance (the frequency which the speaker most easily reproduces) should be as low as possible for the bass speaker, but there is an exception to this – speakers designed specifically for use with bass instruments do not have the lowest possible resonance, because this combined with the heavily accentuated bass bass notes from the bass instrument would result in excessive excursions of the speaker cone which would cause damage to the speaker.

Frequency response: Whilst, ideally, one should aim to cover the audible spectrum of, say 30–20000 Hz as near as possible, the frequency response is not, in itself, a measure of the quality of a loudspeaker. Much more important is the quality of reproduction in the mid range where the majority of musical sounds occur.

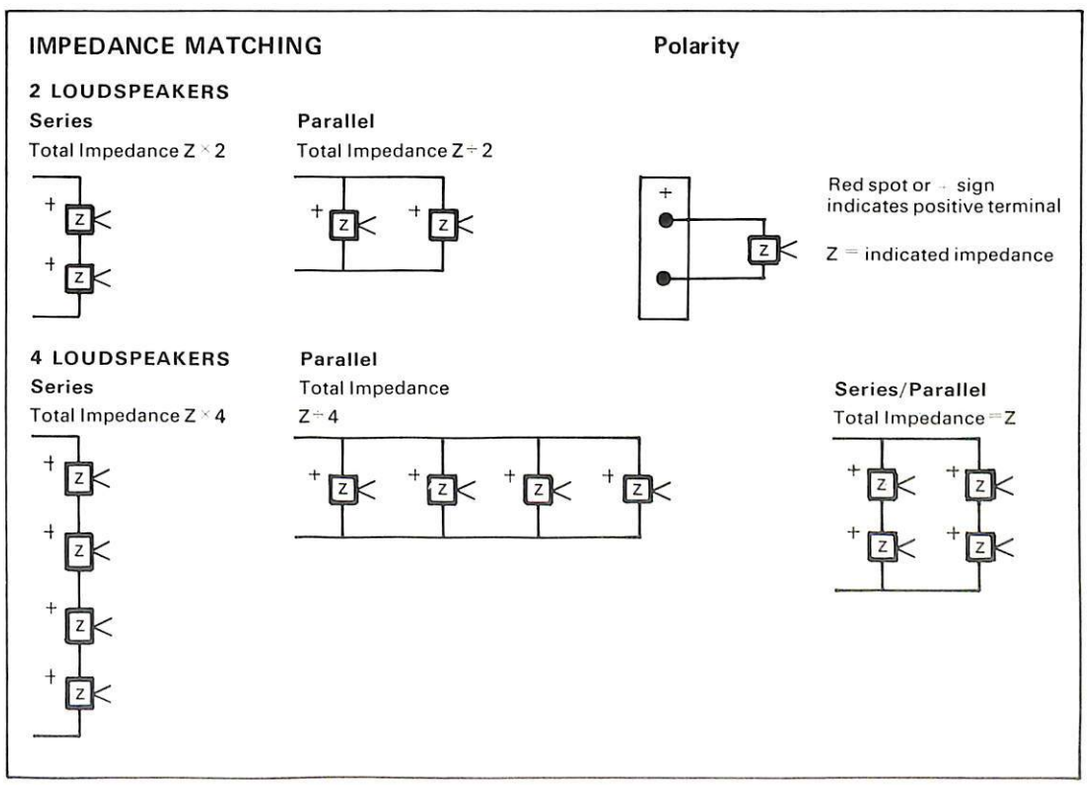
Magnets: The quality and volume obtained from a speaker are greatly dependent on the power of the magnet fitted. So, in general, the bigger and heavier the magnet, the better the performance of the speaker is likely to be.

Cabinets: These should be as acoustically "dead" as possible, which means rigid construction of, say, heavy chipboard and lining with acoustic wadding to prevent sound reflecting from the inside of the cabinet onto the back of the speaker cone.

Tweeters and Crossovers: Whilst a single good quality full range speaker can give very pleasant sound, even better results can be obtained by feeding, via a crossover network, the bass and mid range to a large speaker and the treble notes to a small speaker (tweeter). Better still, a three speaker may be used, tweeter, mid range and bass speakers with a three way crossover.
Several manufacturers offer construction kits of matched loudspeakers complete with crossovers, acoustic wadding, etc.

Connecting Loudspeakers

Loudspeakers can be wired in series or parallel, or indeed any combination of these to obtain a convenient total load impedance for the amplifier.
Do not use loudspeakers of differing impedances in one system, as this will cause uneven distribution of the audio power. Observe the polarity of the connections at all times, particularly where more than one loudspeaker is housed in an enclosure.



baker

After tests with leading Groups we have produced loudspeakers robustly constructed to stand up to long periods of electronic power and designed to give good tonal quality in cabinets of portable size. All models are fitted with heavy cones giving full output down to the E-string of BASS GUITARS at 41 cps.

"GROUP 25" 12 inch

Voice Coil Impedance	3 or 8 or 15 ohms
Maximum Power	25 watts (50 watts U.S.A.)
Bass resonance	55 c.p.s.
Useful Response	30–13,000 c.p.s.
Flux density	12,000 lines
Voice coil	1¼"/38 mm.
Overall diameter	12¼"/310 mm.
Overall depth	4¾"/120 mm.
Fixing holes diagonal	13"/330 mm.
Baffle aperture	11"/280 mm.
Nett weight	5 lbs./2.3 kg.

"GROUP 35" 12 inch

Voice Coil Impedance	3 or 8 or 15 ohms
Maximum Power	35 watts (70 watts U.S.A.)
Bass Resonance	55 c.p.s.
Useful Response	30–13,000 c.p.s.
Flux Density	14,000 lines
Voice coil	1¼"/38 mm.
Overall diameter	12¼"/310 mm.
Overall depth	4¾"/120 mm.
Fixing holes diagonal	13"/330 mm.
Baffle aperture	11"/280 mm.
Nett weight	6 lbs./2.7 kg.

The REGENT 12 inch

An inexpensive unit for the beginner in high fidelity and for general purposes. May be used to advantage with any Radio. Amplifier or Television receiver.

Maximum Power	15 watts (30 watts U.S.A.)
Bass Resonance	45 c.p.s.
Flux Density	12,000 gauss
Voice Coil diameter	1¼"/38 mm.
Voice Coil impedance	3 or 8 or 15 ohm models
Voice Coil material	Copper
Useful response	45–13,000 c.p.s.
Cone surround	Paper roll
Chassis material	Solid aluminium
Overall diameter	12¼"/310 mm.
Overall depth	4¾"/120 mm.
Fixing holes diagonal	13"/330 mm.
Baffle aperture	11"/280 mm.
Nett weight	5 lbs./2.3 kg.

The SUPERB 12 inch

A high quality loudspeaker, its remarkable low cone resonance ensures clear reproduction of the deepest bass. Fitted with a special copper drive and concentric tweeter cone resulting in full range reproduction with remarkable efficiency in the upper register.

Maximum Power	20 watts (40 watts U.S.A.)
Bass Resonance	25 c.p.s.
Flux Density	16,500 gauss
Voice coil diameter	1¼"/38 mm.
Voice coil impedance	8 or 15 ohms
Voice coil material	Copper
Useful response	20–17,000 c.p.s.
Cone surround	Plastic
Chassis material	Solid aluminium
Overall diameter	12¼"/310 mm.
Overall depth	5"/130 mm.
Fixing holes diagonal	13"/330 mm.
Baffle aperture	11"/280 mm.
Nett weight	10 lbs./4.5 kg.

The AUDITORIUM 12 inch

A full range reproducer for high power, Electronic Guitars, public address, multi-speaker systems, electronic organs. Ideal for Hi-Fi and Discotheques.

Maximum Power	25 watts (50 watts U.S.A.)
Bass Resonance	35 c.p.s.
Flux Density	15,000 gauss
Voice coil diameter	1¼"/38 mm.
Voice coil impedance	8 or 15 ohms
Voice coil material	Copper
Useful response	25–16,000 c.p.s.
Cone surround	Paper roll
Chassis material	Solid aluminium
Overall diameter	12¼"/310 mm.
Overall depth	5"/130 mm.
Fixing holes diagonal	13"/330 mm.
Baffle aperture	11"/280 mm.
Nett weight	10 lbs./4.5 kg.

The AUDITORIUM 15 inch

A high wattage loudspeaker of exceptional quality with a level response to above 8,000 cps. Ideal for Public Address, Discotheques, Electronic instruments and the home.

Maximum Power	35 watts (70 watts U.S.A.)
Bass Resonance	35 c.p.s.
Flux Density	15,000 gauss
Voice coil diameter	2"/51 mm.
Voice coil impedance	8 or 15 ohms
Voice coil material	Copper
Useful response	20–14,000 c.p.s.
Cone surround	Paper roll
Chassis material	Solid aluminium
Overall diameter	15½"/390 mm.
Overall depth	6"/153 mm.
Fixing holes diagonal	16¾"/417 mm.
Baffle aperture	14"/360 mm.
Nett weight	15 lbs./6.8 kg.

"GROUP 50" 15 inch

Voice Coil Impedance	8 or 15 ohms
Maximum Power	50 watts (100 watts U.S.A.)
Bass Resonance	45 c.p.s.
Useful Response	30–13,000 c.p.s.
Flux Density	15,000 lines
Voice coil	2"/51 mm.
Overall diameter	15½"/390 mm.
Overall depth	6"/153 mm.
Fixing holes diagonal	16¾"/417 mm.
Baffle aperture	14"/360 mm.
Nett weight	15 lbs./6 8 kg.

"GROUP 50/12" 12 inch

Voice Coil Impedance	8 or 15 ohms
Maximum Power	50 watts (100 watts U.S.A.)
Bass Resonance	55 c.p.s.
Useful Response	30 16,000 c.p.s.
Flux Density	15,000 lines
Voice Coil	1½"/38 mm
Overall diameter	12½"/310 mm
Overall depth	4¾"/120 mm
Fixing holes diagonal	13"/330 mm
Baffle aperture	11"/280 mm
Nett weight	10 lbs/4.5 kg.

The MAJOR 12 inch

This model has a more powerful magnet for use where higher outputs are desired in the home, public address, Discotheques, etc. Built-in concentric tweeter cone.

Maximum Power	20 watts (40 watts U.S.A.)
Bass Resonance	40 c.p.s.
Flux Density	14,000 gauss
Voice coil diameter	1¼"/38 mm.
Voice coil impedance	3 or 8 or 15 ohms
Voice coil material	Copper
Useful response	30–14,500 c.p.s.
Cone surround	Paper roll
Chassis material	Solid aluminium
Overall diameter	12¼"/310 mm.
Overall depth	4¾"/120 mm.
Fixing holes diagonal	13"/330 mm.
Baffle aperture	11"/280 mm.
Nett weight	6 lbs./2.7 kg.

The DE LUXE Mk. II 12 inch

This loudspeaker is especially designed to provide full range reproduction at an economical cost. Suitable for use with any high fidelity system. Built-in concentric tweeter cone.

Maximum Power	15 watts (30 watts U.S.A.)
Bass Resonance	30 c.p.s.
Flux Density	14,000 gauss
Voice coil diameter	1¼"/38 mm.
Voice coil impedance	8 or 15 ohms
Voice coil material	Copper
Useful response	25–16,000 c.p.s.
Cone surround	Plastic
Chassis material	Solid aluminium
Overall diameter	12¼"/310 mm.
Overall depth	4¾"/120 mm.
Fixing holes diagonal	13"/330 mm.
Baffle aperture	11"/280 mm.
Nett weight	6 lbs./2.7 kg.

FANE

HEAVY DUTY SYSTEM and PA LOUDSPEAKERS

Type	Music Watts	RMS Watts	Freq. Range	Main Resonance	Diameter ins	Flux Density Gauss	Weight lbs	Speech Coil
†POP 15	20	15	40 Hz to 18 kHz	50 Hz	12	11,000	4	1″
†POP 25/2	50	25	40 Hz to 15 kHz	70 Hz	12	10,000	4	2″
*POP 50	100	50	50 Hz to 8 kHz	75 Hz	12	13,000	7	2″
*POP 60	120	60	45 Hz to 5 kHz	70 Hz	15	14,000	9	2″
*POP 100	200	100	20 Hz to 5 kHz	55 Hz	18	14,000	22	3″

Mounting diameter – 12″ = 11¾″, 4 holes ¼″ ø
Mounting diameter – 15″ = 14·67″, 4 holes ¼″ ø
Mounting diameter – 18″ = 17¼″, 8 holes $\frac{5}{16}$″ ø

†With twin cone. Not intended for bass instruments or organs.
*Single cone. May be used with any instrument.

8″ MODELS

MODELS 800

1″ VOICE COILS

CERAMIC MAGNETS

These models are fitted with parasitic tweeters and roll P.V.C. cone surrounds.

Also in stock: Model 801 (bass unit, single cone).

Model No.	Gauss	Power Watts R.M.S.	Bass Resonance	Frequency Response	Standard Impedance	Overall Height	Fixing Holes	Net Weight
807 T	10,000	10	30 Hz	25 Hz-15 KHz	8-15 ohms	3″	4 Holes ¼″ on P.C.D. 7 5/8	1lb 3oz
803 T	13,000	10	30 Hz	25 Hz-15 KHz	8-15 ohms	3 1/16″	″	2lbs 4oz
801 T	15,000	10	30 Hz	25 Hz-15 KHz	8-15 ohms	3 7/16″	″	3lbs 7oz

Celestion "POWER" RANGE

HEAVY DUTY CONE AND PRESSURE TYPE LOUDSPEAKERS

Manufactured to the most exacting standards, the "Power" range of loudspeakers is specifically designed for heavy duty public address and electronic musical instrument applications (guitars, organs, etc.). Feroba II ceramic magnet systems, employed throughout the range, ensure exceptional efficiency and control. Voice coil leads are specially terminated to eliminate the possibility of fracture and all moving parts are housed in rugged chassis to ensure permanent alignment.

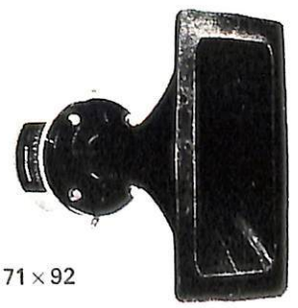
SPECIFICATIONS

Model	Power (Watts) RMS	Reson-ance (Hz)	Response (Hz)	Voice Coil Diameter in	Voice Coil Diameter mm	Magnet Weight lbs	Magnet Weight kg	Total Flux (Maxwells)	Weight lbs	Weight kg	Dia. ins.	Enclosure internal volume*
G12M	25	75	40–8000	1·75	44	2·5	1·13	145,000	8	3·63	12	2,500 cu″
G12H	30	75	40–8000	1·75	44	3·5	1·58	180,000	11	4·9	12	2,500 cu″
G15C	50	55	30–8000	2	51	3	1·36	180,000	12·5	5·65	15	5,000 cu″
G18C	100	35	25–5000	3	76	5	2·26	285,000	22	10·00	18	8,000 cu″

Impedance 8 and 16 ohms for all models.

THE MH1000 MIDDLE/HIGH RANGE HORN LOADED PRESSURE UNIT

CELESTION



SPECIFICATION

Frequency Range: 800–10,000 Hz.
System Power Handling Capacity: 25 watts.
Impedance: 8 or 15 ohms.
Flare Opening: 5½″ × 2½″ (140 × 635 mm).
Weight: 3 lbs. (1.36 kg).
Overall Length: 6⅝″ (168 mm).

Diameter of Magnet Cover: 3″ (76 mm).
Outside Dimensions of Horn: 6¾″ × 3⅝″ (171 × 92 mm).

The MH1000 has been designed for use in systems where the middle/high frequencies require reinforcement. A self-centering diaphragm and phase corrected throat assembly is fitted to the high sensitivity pressure type drive unit and coupled to an exponential horn.

Goodmans

Goodmans POWER RANGE AUDIOMS

POWER RANGE LOUDSPEAKERS are for professional use, where reliability has to complement the total sound performance. The listed uses are typical, not an exhaustive detailing. Power range loudspeakers are found in such diverse situations as acoustic research, pest control and alarm systems. Popular examples are shown for ease of selection.

8P

SPECIFICATION
Nominal Power Rating: 15 watts.
Fundamental Resonance (Typical): 85 Hz.
Flux Density (Typical): 12,500 gauss.
Voice Coil Diameter: 1″ (25 mm).
Impedance: 8 or 15 ohms.
Overall Diameter: $8\frac{1}{32}$″ (204 mm).
Suitable Sealed Enclosure Volume (per loudspeaker): 1,300 cu.ins (20 lts).

10P

SPECIFICATION
Nominal Power Rating: 15 watts.
Fundamental Resonance (Typical): 85 Hz.
Flux Density (Typical): 12,500 gauss.
Voice Coil Diameter: 1″ (25 mm).
Impedance: 8 or 15 ohms.
Overall Diameter: $10\frac{3}{16}$″ (259 mm).
Baffle Hole Diameter: 9″ (229 mm).
Suitable Sealed Enclosure Volume (per loudspeaker): 2,000 cu.ins (30 lts).

12P

SPECIFICATION
Nominal Power Rating: 50 watts.
Fundamental Resonance (Typical): 85 Hz.
Flux Density (Typical): 14,000 gauss.
Voice Coil Diameter: $1\frac{3}{4}$″ (44 mm).
Impedance: 8 or 15 ohms.
Overall Diameter: $12\frac{1}{4}$″ (311 mm).
Baffle Hole Diameter: 11″ (279 mm).
Suitable Sealed Enclosure Volume (per loudspeaker): 3,000 cu.ins (50 lts).

15P

SPECIFICATION
Nominal Power Rating: 50 watts
Fundamental Resonance (Typical): 56 Hz.
Flux Density (Typical): 15,000 gauss.
Voice Coil Diameter: $1\frac{3}{4}$″ (44 mm).
Impedance: 8 or 15 ohms.
Overall Diameter: $15\frac{1}{16}$″ (383 mm).
Baffle Hole Diameter: 13″ (330 mm)
Suitable Sealed Enclosure Volume (per loudspeaker): 4,800 cu.ins (80 lts).

18P

SPECIFICATION
Nominal Power Rating: 100 watts.
Fundamental Resonance (Typical): 45 Hz.
Flux Density (Typical): 13,500 gauss.
Voice Coil Diameter: 3″ (76 mm).
Impedance: 8 or 15 ohms.
Overall Diameter: $18\frac{1}{16}$″ (459 mm).
Baffle Hole Diameter: $16\frac{1}{4}$″ (413 mm).
Suitable Sealed Enclosure Volume (per loudspeaker): 7,000 cu.ins (120 lts)

		8P	10P	12P	12P-D	12P-G	15P	18P	12AX	15AX
Public Address	Indoors	X	X		X					
	Outdoors		X	X		X			X	X
Musical Instrument Amplification	Pop organs			X		X	X		X	X
	Pop Guitars		X	X		X			X	X
	Bass Guitars			X		X		X	X	X
Discotheques Theatres, Clubs	Low Power	X								
	High Power				X					

Audiom 12P-G

SPECIFICATION
Nominal Power Rating: 50 watts.
Impedance: 8 or 15 ohms.
Fundamental Resonance: 70 Hz.
Flux Density: 14,750 gauss.
Voice Coil Diameter: 45 mm.
Depth: 140 mm ($5\frac{1}{2}$″).
Diameter: Overall 311 mm ($12\frac{1}{4}$″).
4 Equally-spaced Fixing Holes in Chassis: 8 mm ($\frac{5}{16}$″) diameter on a Circle of 298 mm ($11\frac{3}{4}$″) diameter.

Audiom 12P-D

SPECIFICATION
Nominal Power Rating: 50 watts.
Impedance: 8 or 15 ohms.
Fundamental Resonance: 55 Hz.
Flux Density: 14,750 gauss.
Voice Coil Diameter: 45 mm.
Depth: 142 mm ($5\frac{6}{8}$″).
Diameter: Overall 311 mm ($12\frac{1}{4}$″).
4 Equally-spaced Fixing Holes in Chassis: 8 mm ($\frac{5}{16}$″) diameter on a Circle of 298 mm ($11\frac{3}{4}$″) diameter.

Goodmans

Axent 100

A state-of-the-art high frequency radiator of negligible distortion designed with built-in crossover unit. Stable, heavily damped, synthetic fabric dome in a phase correcting throat permits excellent phase frequency response and transient performance.

Frequency Response:	typically 2,000–22,000 Hz ± 2 dB.
Maximum RMS Input:	3 watts.
Maximum Total System Rating:	30 watts.
Impedance:	8 ohms.
Filter Network Response:	12 dB/octave below 3,000 Hz.
Dimension across Corners	$4\frac{3}{8}$″ (112 mm).

Audiom 100

Developed to provide the bass unit for two-speaker systems, the high frequency roll-off of the Audiom 100 has been tailored to match the Axent 100 high frequency speaker and crossover unit giving together a smooth response throughout the audio range. In this system it will handle 30 watts DIN.

Frequency Range:	35–3,000 Hz.
Fundamental Resonance:	35 Hz.
Nominal Power Rating:	40 watts DIN.
Impedance:	8 or 15 ohms.
Flux Density:	10,000 Gauss.
Overall Diameter:	$12\frac{17}{64}$″ (312 mm).
Recommended Enclosure Volume:	3,200 cu.ins. (50 lts.).

Axiom 401

Developed as the high power version of our well-known 12″ Axiom loudspeakers, this unit with its generous sized casting has a voice coil capable of dissipating continuous rated power over its full frequency range. Can be used in multiples.

Frequency Range.:	30–11,000 Hz.
Nominal Power Rating:	40 watts DIN.
Fundamental Resonance:	35 Hz.
Impedance:	8 or 15 ohms.
Flux Density:	15,500 Gauss.
Overall Diameter:	$12\frac{17}{64}$″ (312 mm).
Recommended Sealed Enclosure Volume:	PA Systems: 2,300 cu.ins. (40 lts). (per speaker). Discotheques: 3,600 cu.ins. (60 lts.) (per speaker).

Goodmans

Twinaxiom 8

This model, the smallest of the range is ideally suited to budget enclosures, having small physical size and ability to provide full frequency reproduction at 15 watts. It is sensitive enough to be used at 4–5 watts with adequate volume.

Frequency Range: 40–18,000 Hz.

Nominal Power Rating: 15 watts DIN.

Fundamental Resonance: 35 Hz.

Impedance: 8 or 15 ohms.

Flux Density: 13,500 Gauss.

Overall Diameter: $8\frac{1}{32}$" (205 mm).

Suitable Enclosure Volume: 2,000 cu.ins. (30 lts.).

Twinaxiom 10

For larger cabinets than the Twin Axiom 8, where space does not permit the use of our 12" speakers. The same excellent design features as used in the Twin Axiom 8 are employed giving smooth full-range response.

Frequency Response: 40–18,000 Hz.

Nominal Power Rating: 15 watts DIN.

Fundamental Resonance: 40Hz.

Impedance: 8 or 15 ohms.

Flux Density: 13,500 Gauss.

Overall Diameter: $10\frac{15}{32}$" (266 mm).

Recommended Enclosure Volume: 3,000 cu.ins. (45 lts.).

Audiomax 12AX

Nominal impedance: 8 or 15 Ohms
Nominal power handling: 100 Watts
Fundamental resonance: 55 Herz
Sensitivity (96dB at 1m): 0.12 Watts
Recommended enclosure volume for single unit: 40 Litres
Depth, overall: 125 mm
Diameter, overall: 312 mm
Baffle hole diameter : 278 mm
Fixing hole diameter: 8 off 7.2 mm
Fixing hole centres : 299 mm (PCD)

Audiomax 15AX

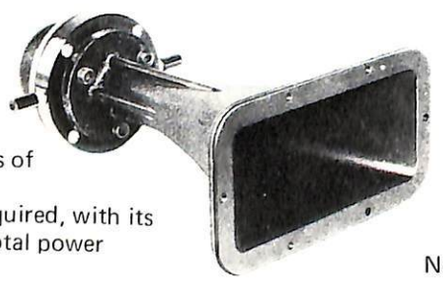
Nominal impedance: 8 or 15 Ohms
Nominal power handling: 100 Watts
Fundamental resonance: 55 Herz
Sensitivity (96dB at 1m): 0.25 Watts
Recommended enclosure volume for single unit: 80 Litres
Depth, overall: 144 mm
Diameter, overall: 395 mm
Baffle hole diameter : 356 mm
Fixing hole diameter: 8 off 7.2 mm
Fixing hole centres : 375 mm (PCD)

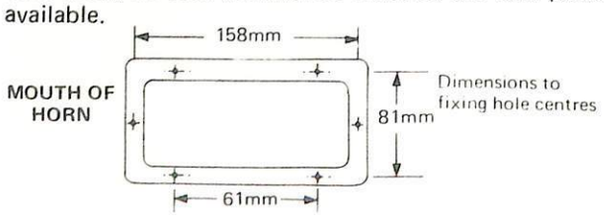
Midax 750

The Midax 750 is a high power, high frequency unit for use with Goodmans Power Range loudspeakers.

When used with the filter, components included, it will operate over the upper octaves of a 50 Watt wide range speaker system

In high power systems one Midax 750 is required, with its own filter, for each nominal 50 Watts of the total power available.





Nominal impedance: for use with systems rated at 8 or 15 Ohms
Nominal power handling: systems rated at 50 Watts
Recommended filter frequency: 2,000 Hz
Frequency range: 1,000 – 10,000 Herz
Depth, overall: 253 mm
Baffle hole: 143 x 65 mm
Fixing hole diameter: 6 of 4 mm

Richard Allan

SUPER TRIPLE ASSEMBLY

CG12 Super Bass Unit – 186,000 total flux, ceramic magnet.
CB8 Midrange Unit 48,000 total flux, ceramic magnet.
CB4 Treble Unit – 15,000 total flux, ceramic magnet.
½ Section Crossover network.

FREQUENCY RANGE – 30 to 17,000Hz. in recommended cabinet.
POWER HANDLING – 25 watts R.M.S.
IMPEDANCE – 8 or 15 ohms.
RECOMMENDED CABINET SIZE – 25″ × 15½″ × 12½″ (64 × 39 × 32cm).

TRIPLE ASSEMBLY

CG12 Bass Unit – 105,000 total flux, ceramic magnet.
CP8 Midrange Unit – 40,000 total flux, ceramic magnet.
CB4 Treble Unit – 15,000 total flux, ceramic magnet.
¼ Section printed circuit Crossover network.

FREQUENCY RANGE – 30 to 17,000Hz. in recommended cabinet.
POWER HANDLING – 20 watts R.M.S.
IMPEDANCE – 8 or 15 ohms.
RECOMMENDED CABINET SIZE – 25″ × 15½″ × 12½″ (64 × 39 × 32cm).

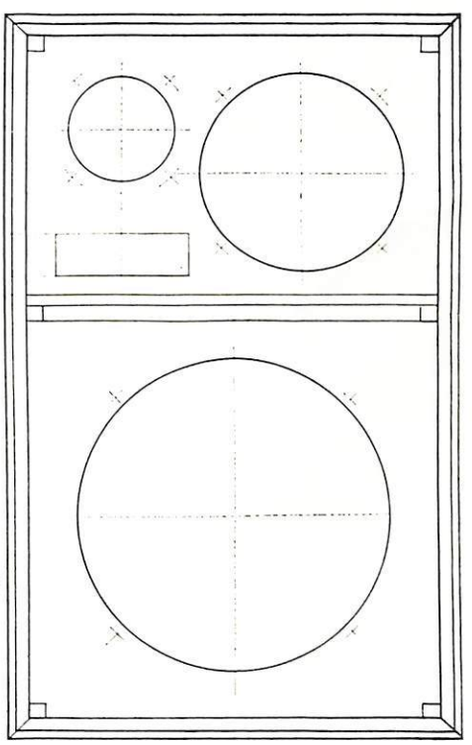
THE TRIPLE 8 ASSEMBLY (*Flamenco*® SERIES II)

Contains:—

— CF8L Bass Unit – Roll Surround with 56,000 total flux ceramic magnet.
— CF5 Midrange Unit – Roll Surround with 32,000 total flux ceramic magnet.
— CB4 Treble Unit – 12,000 total flux ceramic magnet.
— CN54F – ¼ Section printed circuit 3 way Crossover Network.
— Wadding, midrange tube, detailed assembly instructions and plans, fixing screws, terminals, pre-cut foam sheet and post card to obtain your choice of fret material by return of post.

FREQUENCY RANGE – 40 to 17,000Hz. in recommended cabinet.
POWER HANDLING – 15 watts R.M.S. based.
IMPEDANCE – 8 or 15 ohms.
RECOMMENDED CABINET SIZE – 20½″ x 13″ x 8½″ (52 x 33 x 22 cm)
WEIGHT – 11½ lbs. (5·2 kgs.)

MATERIAL:— ¾″ (19mm) THICK CHIPBOARD OR SIMILAR. RIGID CONSTRUCTION. ALL JOINTS AIRTIGHT



THE TWIN ASSEMBLY (*Chaconne* SERIES II)

Contains:—

CBF8 Bass/Midrange Unit – 48,000 total flux, ceramic magnet.

CB4 Treble Unit – 12,000 total flux, ceramic magnet.

CN54 ¼ Section printed circuit. 2 way. Crossover network.

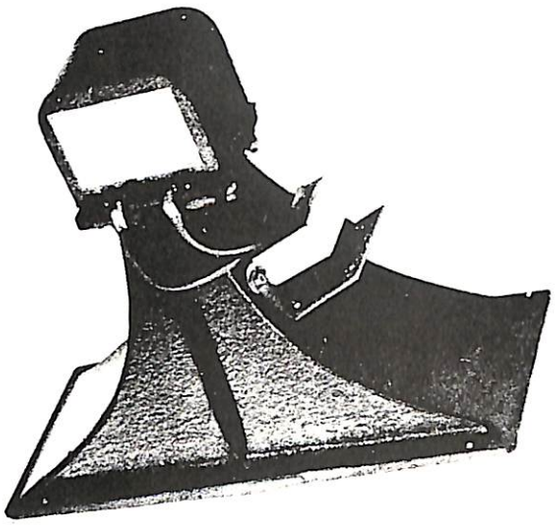
B.A.F. wadding, Vynair fret material, foam backing sheet, detailed assembly instructions, fixing screws, terminals, etc.

FREQUENCY RANGE – 40 to 17,000Hz. in recommended cabinet.
POWER HANDLING – 12 watts R.M.S. based.
IMPEDANCE – 8 or 15 ohms.
RECOMMENDED CABINET SIZE – 20″ x 12″ x 9″ (51 x 30 x 23cm).
WEIGHT – 10 lbs. (4·5 kilos)

FANE acoustics LIMITED

High Fidelity Loudspeakers

MODEL 701. TWIN – RIBBON HIGH FREQUENCY LOUDSPEAKER



Impedance:	8–15 ohms.
Frequency Range:	1–25 KHz.
Horn Cut-off:	550 Hz.
Crossover:	1700 Hz.
Power Handling:	30 watts.
Sensitivity:	90 dB at 2 KHz for 1 watt input at 1 metre on axis.
Dimensions:	Width 12⅞", Height 6¼", Depth 10¼".
Net Weight:	10 lbs.

The Model 701 is a high fidelity loudspeaker for reproducing audio frequencies above 1000 Hz. It consists of two independent horn loaded ribbon units mounted side by side and has a substantially level response from 1000 Hz to 25 KHz.
It has a built in matching transformer and crossover network. This has terminal points for the input and connection to any good bass speaker.

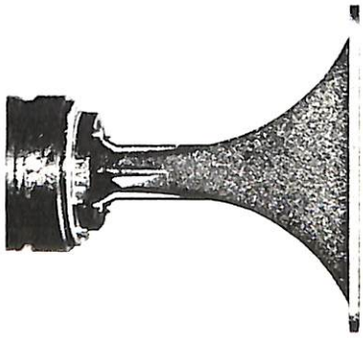
MODE ONE LOUDSPEAKER KIT

A high fidelity loudspeaker assembly consisting of a special low resonance 8" speaker, Fane model 803, together with a high frequency pressure unit, Fane model 303, and crossover network. A specification of the model 803 is given below. The model 303 is as above.

Overall Diameter:	8".
Magnet Pole Diameter:	1".
Impedance:	8–15 ohms.
Main Resonance:	13,000 gauss
Power Handling:	15 watts.
Flux Density:	13,000 gauss.

The crossover network is built on a printed circuit board and consists of two 0·5 mH ferrite cored inductors and an 8 mFd capacitor. Crossover 2·5 KHz.
The frequency response of the mode one is 30–16,000 Hz.
Recommended inside cabinet size is 15" × 10" × 8" of ½" thick material.

MODEL 910



Frequency Range	1000 to 15,000 Hz	Horn Cut-off	924 Hz
Power rating – Watts RMS	above 1000 Hz–25	Recommended series capacitor	8 microfarads
Sound level at 1 metre for 1 watt input	107 dB at 2 KHz	Mouth of horn	16·8 cm × 9·1 cm
Input Impedance	8–15 ohms	Overall depth	16·5 cm
		Nett Weight	1·1 kg

Model 910 is a sensitive high power tweeter which may be used to supplement the high frequency response of a 12" or 15" speaker for use with a guitar, electronic organ, or similar application.
It should be operated with a cross-over frequency not less than 1000 Hz or with a simple series condenser of 8 microfarads of the reverseable electrolytic type.

MODEL 920

Frequency Range	500 to 20,000 Hz	Recommended series capacitor	25 microfarads
Power rating – Watts RMS	above 600 Hz–100	Mouth of horn	35·5 cm × 20·3 cm
Sound level at 1 metre for 1 watt	109 dB at 1 KHz	Overall depth	38·1 cm
Input Impedance	8–15 ohms	Depth in cabinet	33 cm
Horn Cut-off	469 Hz	Nett Weight	5 kg

Model 920 is a very sensitive high power tweeter which may be used to supplement the high frequency response of any high power bass speaker for the reproduction of voice or instruments.
It should be operated with a cross-over of 500 Hz or with a simple series condenser of 25 microfarads. It may also be used at up to 50 watts as a full range speaker for vocal announcements.

HOW THE BBC HELP KEF MAKE BETTER LOUDSPEAKERS

You choose a loudspeaker by how it sounds. So do the BBC. The loudspeaker used by the BBC for quality monitoring was developed with instant, direct reference to the sound of **live** music in their studios—a facility not available in an ordinary laboratory. These specialised, individually calibrated loudspeakers are made for the BBC exclusively by KEF. They form a constantly available reference standard to help the development of KEF's high fidelity loudspeakers towards the true sound—the sound of live music.

B110 Bass/Mid Range Unit

Suitable for use as a bass driver in compact 2-way systems or as a mid range unit in 3-way systems. Long voice coil, highly compliant linear roll suspension plus Acoustilene diaphragm combine to give low harmonic distortion, minimum colouration and extra smooth response.

SPECIFICATION:

Size:	5½ in dia. x 3⅛ in deep	**Frequency range:**	30—5,000 Hz
Weight:	3 lb 10 oz 1·6 kg	**Fundamental resonance:**	30 Hz
Impedance:	8 ohms	**Flux density:**	12,000 oersted
Max. input:	15 W	**Total flux:**	64,000 maxwells

T27 Tweeter

This new high frequency unit is of the very latest design and gives the highest standard of performance so far achieved from a moving coil device. The domed Melinex diaphragm is small enough to give a broad radiation pattern up to the highest audio frequency. The high frequency response extends smoothly beyond 30 kHz. The T27 is beautifully engineered in a moulded plastic case with large ferrite magnet assembly.

SPECIFICATION:

Size:	4¼ in dia x 1⅜ in deep	**Frequency range:**	3—30 kHz
Weight:	1 lb 6½ oz 0·64 kg	**Fundamental resonance:**	900 Hz
Impedance:	8 ohms	**Flux density:**	12,500 oersted
Power rating:	6W (30W system)	**Total flux:**	24,700 maxwells

T15

A wide range, low distortion high frequency radiator; fitted with exclusive hemispherical diaphragm made from aluminised Melinex, giving wonderfully smooth response to beyond 20 kHz with wide dispersion of the higher frequencies. The T15 has a special acoustical circuit which ensures level response in the critical frequency range below 4 kHz.

SPECIFICATION:

Size:	3¾ in dia x 1⅞ in deep	**Frequency range:**	800—20,000 Hz
Weight:	2 lb 0·9 kg	**Fundamental resonance:**	550 Hz
Impedance:	8 ohms	**Flux density:**	12,000 oersted
Power rating:	6W (25W system)	**Total flux:**	43,000 maxwells

B139 Bass Unit

One of the most highly developed bass drivers in the world, the B139 is an ideal unit for compact systems. The aluminium stressed plastic diaphragm of the B139 gives complete freedom from transient distortion and break-up. The special shape of the diaphragm is designed to give very wide dispersion up to 1,000 Hz where the response is only 1 dB down at 45° off axis. The B139 has a neoprene roll surround for low distortion bass.

SPECIFICATION:

Size:	13 x 9½ x 3 in	**Frequency range:**	20—1,000 Hz
Weight:	10 lb 4·5 kg	**Fundamental resonance:**	20 Hz
Impedance:	8 ohms		
Power rating:	30W		
Flux density:	10,500 oersted		
Total flux:	137,000 maxwells		

Note: the performance of a loudspeaker system is critically dependent on its enclosure. Full constructional details of suitable enclosures for KEF loudspeaker units and Kefkits are yours for the asking. From KEF Ltd.

DN13

DN13 SP1015 for T27+B200
DN13 SP1017 for T27+B110

A three element printed circuit dividing network for use in combining the T27 with a suitable woofer having an impedance of 5—8 ohms.

DN8

A three element printed circuit dividing network for use in combining the B139 and T15 with crossover at 1 kHz.

Specification:

Size: 2½ x 2½ x 1¼ in
Weight: 3 oz

B200

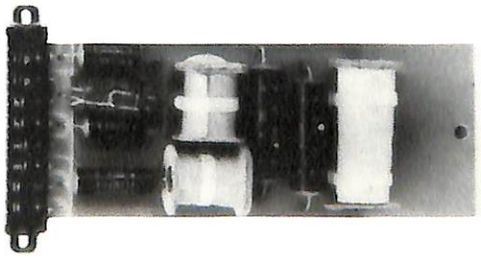
Long throw Bass/Mid range.
Size: 9⅝″ dia.×4½″ deep.
Weight: 3 lbs. 10 oz./1·6 kg.
Impedance: 8 ohms.
Power Rating: 20 watts.
Frequency Range: 25–3,500 Hz.
Fundamental Resonance: 25 Hz.
Flux Density: 12,000 oersted.
Total Flux: 64,000 Maxwells.

DN12

A nine element printed circuit dividing network for use in combining the T27, B110 and B139. The crossover frequencies are approximately 400 and 3,500 Hz. Supplied with edge connector.

Specification:

Size: 6¼ x 2½ x 1⅛ in
Weight: 6¼ oz

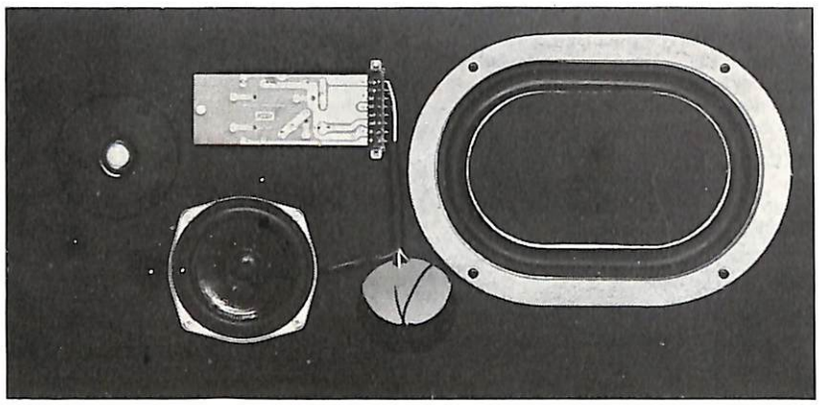


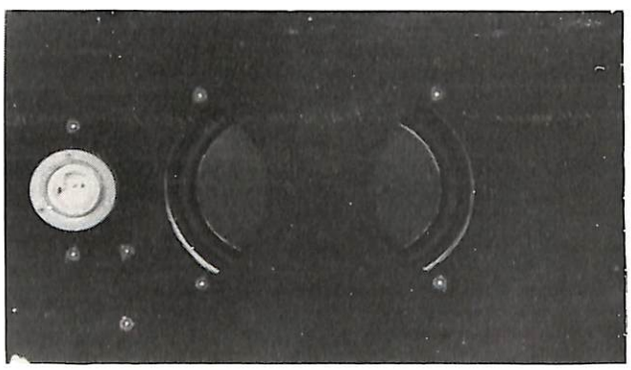
KEFKITS

If you wish to construct your own loudspeaker cabinets, or build a loudspeaker system into a wall or recess, then Kefkits are the answer. Built to the same high standards as KEF's complete systems, Kefkits come with the loudspeaker units already mounted onto a convenient baffle, and wired up with the appropriate dividing network. Instructions come too, giving dimensions of suitable cabinets and details of wall-mounting. Grille cloth, nameplate, terminal panel and screws complete the package, together with BAF wadding to line your enclosure.

KEFKIT 3

Size: 28″×14″×10″.
Weight: 23 lb./10·45 kg.
Power Rating: 30 watts.
Impedance: 8 ohms.
Frequency Range: 30–30,000 Hz.
Units: B139, B110, T27.
Dividing Frequencies:
400–3,500 Hz.
Grill Cloth: Brown.

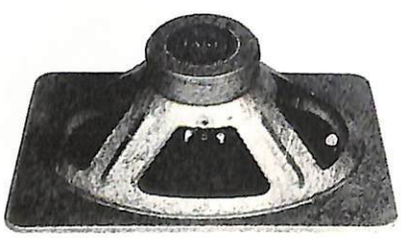




KEFKIT 2

Size	22½×13½×4 in 57×34×10 cm
Weight	15 lb 6·8 kg
Power Rating	25 W
Impedance	8 ohms
Freq. Range	35–20,000 Hz
Units	B139, T15
Dividing Frequency	1,000 Hz
Grille Cloth	Brown

FANE



13″ x 8″ MODELS

1″ VOICE COILS

CERAMIC MAGNETS

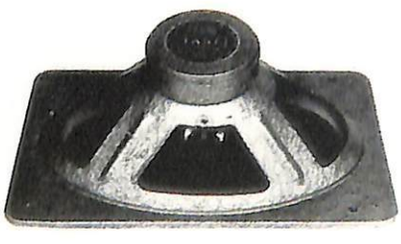
Suffix 'T' indicates fitted with parasitic tweeter

Suffix 'G' indicates fitted with high power voice coil

Suffix 'BXG' indicates bextrene cone, P.V.C. or Linen cone surround and high power voice coil.

Model No.	Gauss	Power Watts R.M.S.	Cone Surround	Frequency Response	Standard Impedance	Overall Height	Fixing Holes	Baffle Hole	Net Weight
138/10 LRT	10,000	15	PVC	30 Hz-15 KHz	**8-15 ohms**	4½″	4 Holes ¼″ 10″ × 6¾″	Ellipse 11½″ × 7¼″	1lb 12ozs.
138/13 LR	13,000	15	″ ″	30 Hz-13 KHz	**8-15 ohms**	4 9/16″	″	″	2lbs 13ozs.
138/15 BXG	15,000	25	″ ″	30 Hz-12 KHz	**8-15 ohms**	″	″	″	4 lbs

SG/15



Cabinet volume 2,000 cubic ins. for a single loudspeaker

A highly sensitive, high power 13″ x 8″ unit. **Not recommended for guitar use,** but excellent for general purposes including vocalists, gram, tape, public address, etc. Owing to its forward directivity and extremely smooth response characteristic, it is particularly suitable where difficulty with acoustic feedback through the microphone is experienced. Can be used singly or in multiples vertically in columns.

Power Rating R.M.S. continuous	20 watts
Gauss (Flux Density)	15,000 lines
Impedance	8 or 15 ohms.
Frequency Response	50 — 16,000 Hz.
Bass Resonance	45 Hz.
Voice Coil Diameter	1 inch

PA/DISCO CABINETS

These sturdy cabinets are designed for heavy duty 12″ (305·0 mm) and 15″ (381·0 mm) loudspeaker units, and where a lot of power is required, e.g. Discotheques, Groups, etc. they are finished in Black Vynide with matching Vynair fronts – and a jack socket is fitted for the speaker connection.

R12D

Cabinet only
for 2 heavy duty 12″ (305 mm) Loudspeakers.

Height: 31½″ (800 mm).
Width: 18″ (457 mm).
Depth: 10½″ (267 mm).
Finish: Black Vynide with matching front.

R12

Cabinet only
for 1 heavy duty 12″ (305 mm) Loudspeaker.

Height: 20″ (508 mm).
Width: 16½″ (419 mm).
Depth: 9″ (229 mm).
Finish: Black Vynide with matching front.

Type R124 (for 4 12″ units) 29½″×29½″×12″

Type R18 (for 1 18″ unit) 29½″×29½″×12″

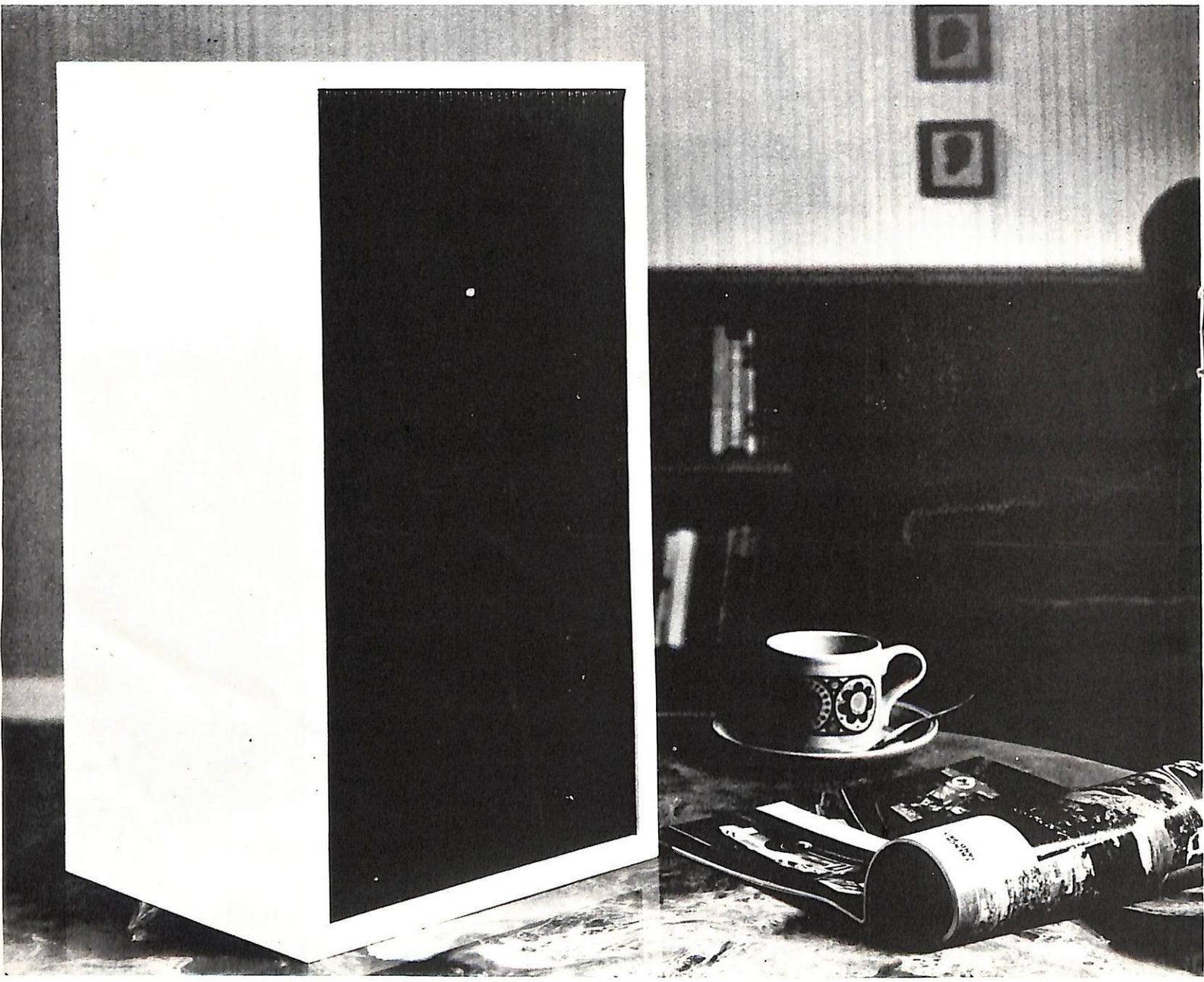
R15

Cabinet only
for 1 heavy duty 15″ (381 mm) Loudspeaker

Height: 20″ (508 mm).
Width: 20″ (508 mm).
Depth: 15″ (381 mm).
Finish: Black Vynide with matching front.

The sound quality of a disco speaker system is greatly improved by the use of mid/high frequency horn units. This dual horn box offers a very neat and convenient method of adding horns to an existing system. Styled to fit on top of speakers such as the R12 and R12D it is available to suit 2 Midax 750, 2 Fane 910 or 2 Celestion MH1000 (specify which type when ordering). Fitted with two ¼″ jack sockets for easy connection.

STEPHENSPEAKERS



TYPE 80

Stephenspeakers are ready-assembled cabinets which are easily completed. The only operations required are:

1. Cut apertures to suit speakers chosen (except type 38 and Stereocube which are already cut out)
2. Fit fret cloth (supplied)
3. Fit and wire up speakers.

Easy! – all types show substantial cash savings over ready-made loudspeakers – without loss of sound quality or aesthetic appeal.

Types 80, 38 and N12 are available in teak or white in stain and scuff resistant vinyl finish.

Sizes:

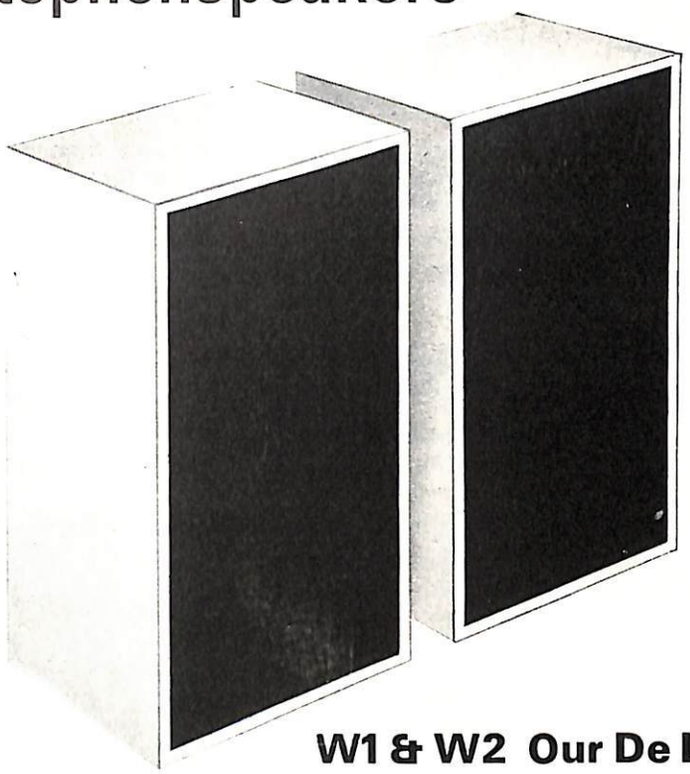
Type	Height	Width	Depth
80	19¼″	10⅜″	9″
38	19¼″	10⅜″	9″
N12	24″	14″	12″

Type N12 cabinets are suitable for the following units:
Richard Allan Triple,
Richard Allan Super Triple,
Wharfedale Dovedale 3,
Goodmans Audiom 100/Axent 100,
All Baker 12″ HiFi types,
Kef B139/TT15, etc.

Type 80 cabinets are suitable for the following:
Fane Mode One,
Wharfedale Linton 2 kit,
Goodmans DIN 20,
Eagle FR8,
Helme XLK25, XLK50, XLK30,
Richard Allan Twinkit,
Goodmans Twinaxiom 8,
Fane 801 + tweeter, 801T, 803T, 807T,
Peerless 3–15, etc.

Type 38 cabinets are suitable for the following:
EMI 150, 450, 350, 92390FN,
Fane 138/1 OLRT, etc.

Stephenspeakers



Superior cabinets of dense, heavy 600 grade chipboard finished in Decamel (like Formica) in white or teak.

Sizes:

Type	Height	Width	Depth
W1	20″	12″	9″
W2	27″	16″	12″

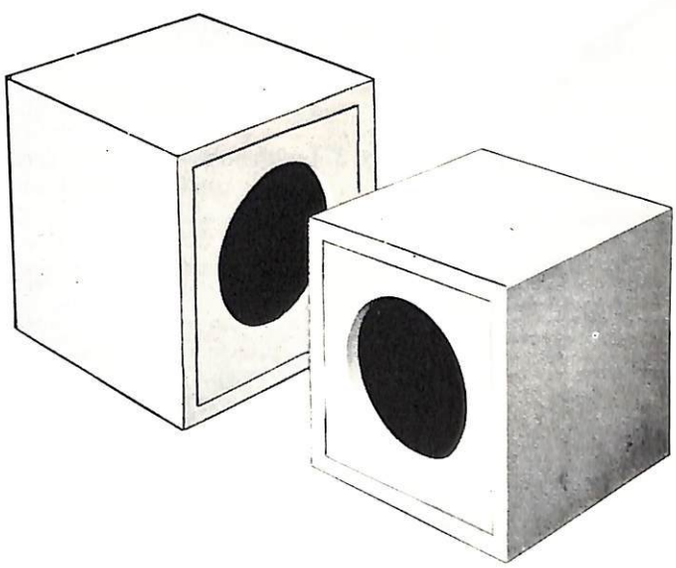
Type W1 cabinets are suitable for the following:
Richard Allan Twin assembly,
Helme XLK25, XLK50, XLK30,
Goodmans DIN 20,
Wharfedale Linton 2 kit,
Richard Allan Triple 8,
Wharfedale Glendale 3 kit,
Kef B139/T15, Kef B200/T27,
Goodmans Twinaxiom 10.
Peerless 3–15, etc.

Type W2 cabinets are suitable for the following:
Wharfedale Dovedale 3 kit,
Richard Allan Triple,
Richard Allan Super Triple,
Goodmans Audiom 100/Axent 100,
All Baker 12″ Hi-Fi types,
Kef B139/B110T/27, etc.

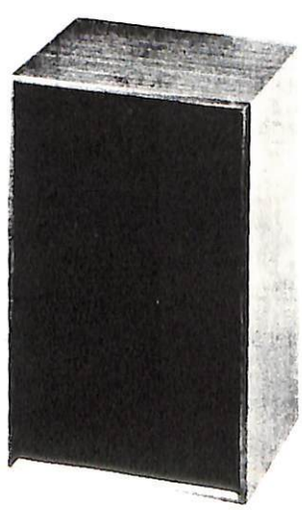
W1 & W2 Our De Luxe Models!

STEREOCUBE 6

In teak or white vinyl finish, these attractive 9″ cubes are designed to use high quality 6½″ units. When used with long throw, roll surround units will give high quality sound from a very compact enclosure and will handle a hefty 10 watts RMS each. Ideal for bookshelves, window ledges, wall mounting or for giving extra stereo "spread" to an existing Hi-Fi installation or stereogram. Many amplifiers have provision for feeding a second pair of speakers in another room, and the Stereocube 6 is ideal for this purpose.



(N.B.–Speaker aperture already cut out and edge finished.)
Recommended units: Elac 6RM171, Eagle FR65.



TS Range – Fully assembled teak finish cabinets, vynair fronts, chrome trim.

Type	Size	Baffle cutout
TS825	11″ × 7¼″ × 5⅞″	8″ × 5″
TS8	12″ × 9½″ × 6″	8″ round
TS83	18″ × 10¾″ × 6⅞″	8″ round + tweeter
TS140	18″ × 10¾″ × 6⅞″	13″ × 8″
TS12	21″ × 14⅜″ × 8½″	12″ round

BST Range – Fully assembled black leathercloth cabinets, vynair fronts, chrome trim.

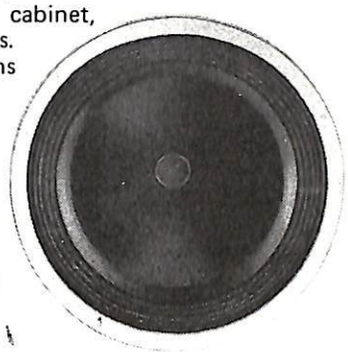
Type	Size	Baffle cutout
BST74	10″ × 5½″ × 4⅛″	7″ × 4″
BST85	11″ × 6⅝″ × 5⅛″	8″ × 5″
BST8	11″ × 9½″ × 6″	8″ round
BST83	17″ × 9½″ × 6″	8″ round + tweeter
BST138	17″ × 9½″ × 6″	13″ × 8″

HELME

Ready-made or in kit form, you are assured of first rate high fidelity performance from HELME loudspeaker systems. The NEW XL series of systems and kits offers outstanding value for money . . . . . custom designed high grade cross-over networks together with the ultimate in quality drive units by Europe's leading high fidelity speaker manufacturers.

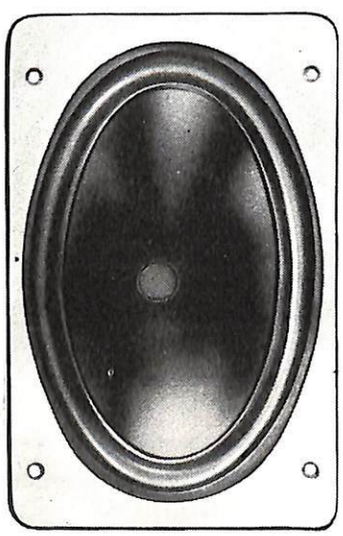
Kits do NOT include cabinet, speaker grille fabric or fibreglass (recommended for use as the supplementary sound absorbent necessary).

Size of cabinet required . . . . . 572 x 318 x 254 mm (22½ x 12½ x 10 in).
Maximum Power Input . . . . . 25 watts (DIN 45573).
Frequency Range . . . . . 45 – 40,000 Hz.
Drive Units . . . . . 2 (one woofer and one tweeter).
Woofer . . . . . diam. 212 mm (8") with specially treated surround for "piston action", free air resonance approx. 37 Hz (70 Hz when mounted in recommended cabinet,
System Design . . . . . For totally enclosed cabinet, cubic capacity 31 litres.
Impedance . . . . . 8 ohms
Suitability . . . For amplifiers of between 6 and 25 watts per channel.
Tweeter . . . . . 80 x 80 mm (3") with special exclusive aluminium cone
Cross-over . . . . . 6 element on printed circuit board



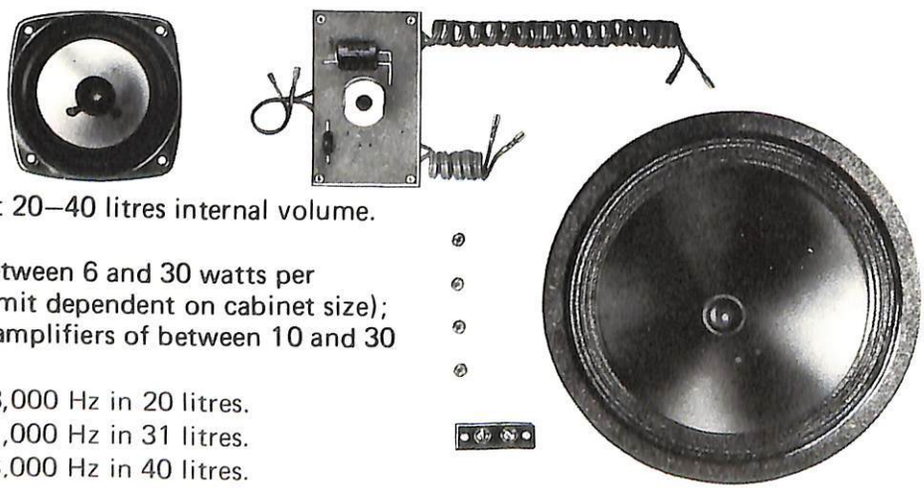
XLK-25 KIT

Size of Cabinet Required . . . . . 572 x 318 x 245 mm (22½ x 12½ x 10 in.)
Maximum Power Input . . . . . 50 watts (DIN 45573).
Frequency range . . . . . 30 – 45,000 Hz.
Drive Units . . . . . 2 (one woofer and one tweeter).
Woofer .332 x 206 mm (13" x 8") with special bextrene cone and PVC roll surround.
System Design . . . . . For totally enclosed cabinet, cubic capacity 31 litres.
Impedance . . . . . 8 ohms
Suitability . For amplifiers of between 8 and 50 watts per channel. As with the XLK 25 kit, a protective fuse is located on the cross-over network which prevents damage to the speakers in the event of accidental overload.
Tweeter . . . . . 80 x 80 mm (3") with special exclusive aluminium cone
Cross-over . . . . . 7 element on printed circuit board



XLK-50 KIT

KIT XLK-30



For . . . . . Totally enclosed cabinet 20–40 litres internal volume.
Impedance . 8 ohms
Suitability . . For 8 ohm amplifiers between 6 and 30 watts per channel (upper power limit dependent on cabinet size); also suitable for 4 ohm amplifiers of between 10 and 30 watts per channel.
Frequency Range . . . . . 50–18,000 Hz in 20 litres.
45–18,000 Hz in 31 litres.
40–18,000 Hz in 40 litres.

The most expensive cassette recorder is only as good as the cassette that goes into it.

Frequency response, mechanical stability, and long-term reliability can all be affected by an inferior cassette.

So Agfa have developed two types of cassette that meet the demands of the new high quality cassette recorders, Agfa Stereo Chrom and Agfa high dynamic "Super".

Agfa Stereo Chrom is one of the new generation of chromium dioxide coated cassettes, designed to give a better frequency response, even at the low tape speeds of a cassette.

Unlike ferric oxide tape, chromium dioxide is more magnetically stable, so the high frequencies that are normally lost at low speeds are preserved.

Using chromium tape, frequencies of 30Hz–18kHz can be recorded with only a 2dB fluctuation.

And that's not all.
Because chromium dioxide is more stable, important recordings can be stored without any fear of deterioration.

While Stereo Chrom has been developed to give the best recordings regardless of cost, Agfa have made a refined version of the conventional ferric tapes to give optimum performance on machines without CrO_2 equalisation.

It's called Agfa high dynamic "Super".

Using a new high-energy oxide, it rivals chromium tape in its stability and extended frequency response.

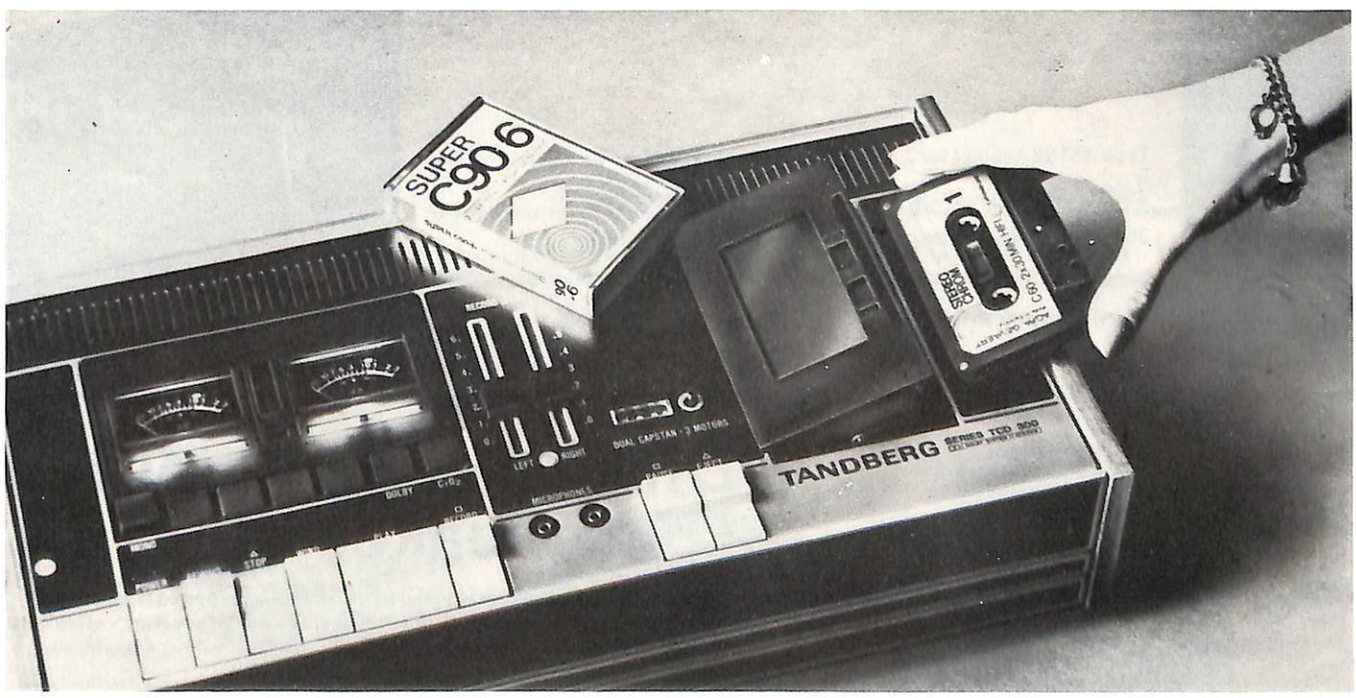
And both Agfa Stereo Chrom and Agfa high dynamic "Super" cassettes are carefully inspected to ensure the mechanical performance is second to none.

If you think your machine deserves the best, go along to your Agfa dealer and ask him about the Agfa range of cassettes.

Agfa Stereo Chrom and Agfa high dynamic "Super".
Made for people who appreciate the best.

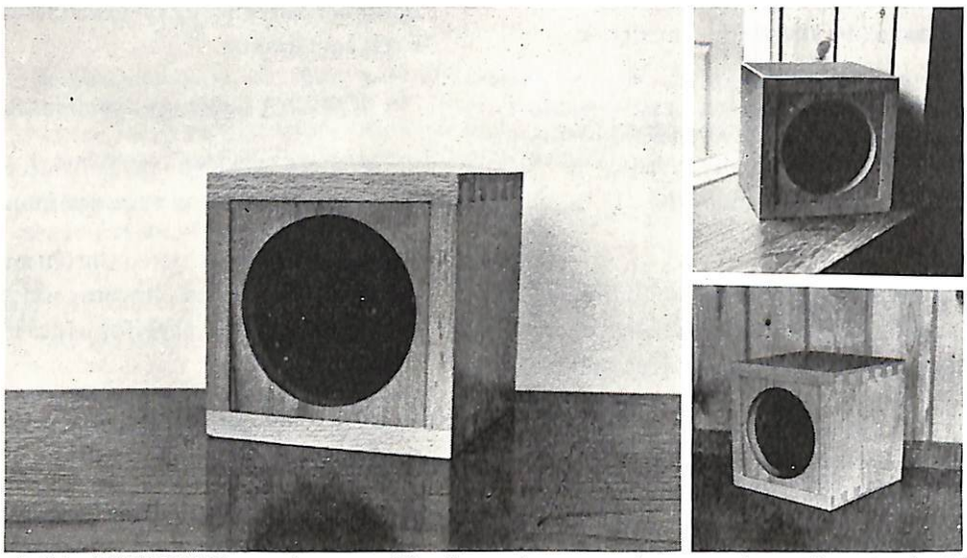
AGFA-GEVAERT

To get the best out of your cassette recorder put the best in.



What's an advertisement about cassettes doing in a catalogue of loudspeakers ? – So many of our clients use cassettes as a music source these days that we decided to offer this extra service. We buy in bulk so that we may offer this Top-quality Agfa tape to you at very low prices.
Return of post service, all cassettes in library case with index card and fully guaranteed.
Agfa cassettes – chosen as a "best buy" – and even better value at our prices!

Wilmslow Audio



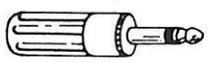
We have designed this MINICUBE speaker specifically to improve the sound quality obtainable from cassette recorders and portable radios.
There simply is not room inside a portable cassette recorder or radio to fit the optimum size loudspeaker in a properly designed infinite baffle enclosure.
Plug the MINICUBE speaker into the extension speaker or earphone socket and you will be amazed at the improvement. The greatly improved "bass response" will add a depth and realism that you would not have believed possible.
To obtain the best possible results from this very compact unit (6″×6″×6″) we have used solid beech with dovetailed construction, which apart from its technical merits gives a very pleasing appearance.
The Minicube also makes a very efficient background music, paging system or extension loudspeaker.

Two types (at the same price):

Type 4/DIN. Fitted with 4 ft. lead and DIN Speaker plug.

DIN Speaker Plug

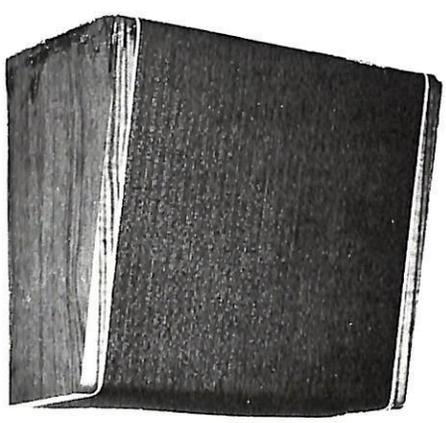
Type 4/35. Fitted with 4 ft. lead and 3·5 mm jack plug.



NOT A KIT – FULLY ASSEMBLED, POLISHED AND WIRED READY TO USE

Type 2X138 cabinet for 2 13″×8″ units (Fane SG15, etc.). 36″×11¾″×7½″. Fitted carrying handle and jack socket. Black leathercloth finish.

Teak finished wedge shaped cabinets for wall mounting.
Type W8 for 8″ unit.
Size: 9¾″×10½″×4″–5½″.
Type W10 for 10″ unit.
Size: 13″×14½″×5″–7½″.



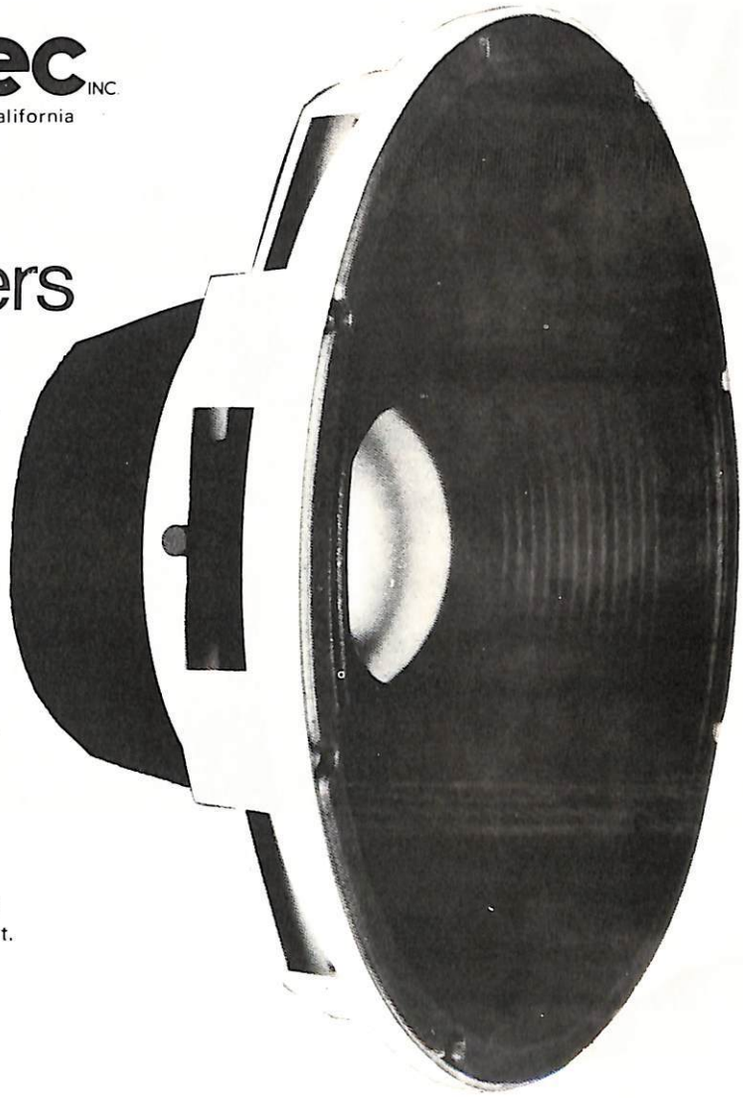
DIN 20 High Fidelity Loudspeaker Kit

All the electrical components required by the enthusiast to build a high fidelity speaker system in his own cabinet. Kit includes bass and HF speakers, crossover unit, port tube and terminal board together with foam padding, wiring, fixing screws and cabinet template.

Drive Units: 8″ Bass, HF Dome radiator.
Crossover Frequency: 4,000 Hz.
Nominal Power Rating: 20 watts DIN.
Frequency Range: 45–22,000 Hz.
Impedance: 4 ohms.
Recommended Cabinet Size: 19¼″×10½″×9¼″.
Recommended volume: 22 litres.

gauss by Cetec INC
Hollywood, California

Group 40 - Musical Instrument Speakers



Gauss – America's top speakers are now available in this country. Three sizes: 12″, 15″ and 18″ all with 4$\frac{1}{8}$″ (10·5 cm) voice coils (the world's largest!).
Impedance: 8 ohms.

Total freedom of artistic expression is made possible by Gauss' careful engineering and meticulous craftsmanship. Outstanding sound quality and high reliability have made the Series 40 the choice of today's discerning professional musicians. In each Series 40 loudspeaker, a massive 17-1/4 lb. magnetic assembly, set in a rigid 8-spoke cast aluminium frame, assures powerful response on the lowest of notes. Gauss' unique double spider system, with a specially designed surround, maintains alignment of the copper voice coil under all transient power conditions. A black anodized aluminium voice coil support and an integral heat-sink pot structure conduct and dissipate heat. The flexible voice coil leads, terminated on the voice coil frame, virtually eliminate potential breakage of the lead wire. These features, combined with Cetec's precision workmanship and rigorous quality control, permit these Gauss speakers to reliably handle up to 200 watts of continuous sine-wave power.

WHARFEDALE

HIGH FIDELITY LOUDSPEAKER UNITS

N.B. – Our stocks of Super 10RS/DD are of original Wharfedale manufacture. The Super 8RS/DD is manufactured by Castle to exact Wharfedale specification.

	Bass Resonance Hz.	Flux Density Oersteds	Total Flux Maxwells	Max. Input RMS Peak	Baffle Opening ins.	Chassis diam. ins.
SUPER 10/RS/DD. 10″ Wide range unit. Impedance 15 ohms. Pole size 1″ diameter. Frequency range: 30–20,000 Hz. Weight 8 lb.	38/43	16,000	85,000	10 20	8$\frac{3}{4}$	9$\frac{3}{4}$
SUPER 8/RS/DD. A superb wide range unit. Impedance 15 ohms. Pole size 1″ diameter. Frequency range: 40–20,000 Hz. Weight 4 lb.	50/60	14,500	60,000	6 12	7	8

WHARFEDALE

Speaker Kits

A real sound saving. Our pure hi-fi speakers in simple unit kit form.

These kits incorporate all the technical excellence of Wharfedale Hi-Fi cabinet systems, and are ready for you to assemble in your own cabinet enclosure, to the guidelines set out in the comprehensive instruction manual supplied with each kit.

Dovedale 3 Kit

This kit makes up into a really top class loudspeaker cabinet system. It is based on the very successful Wharfedale Dovedale 3 cabinet system, and contains a 12″ bass unit, a 5″ mid-range unit and 1″ Treble unit. It also includes attenuator switches for making fine adjustments to the mid-range and treble performance, to suit different room conditions.

Linton 2 Kit

A two speaker kit with an 8″ bass unit and a 2″ Mid-Range/Treble unit. The kit is based on the famous Wharfedale Linton 2 speaker, which is currently Europe's best selling hi-fi loudspeaker.

Glendale 3 Kit

This kit has been produced in response to popular demand for build-it-yourself kits with large speakers. It is a three-speaker kit containing a 10″ bass unit, a 4″ mid-range unit and a 1″ Treble unit.

SPECIFICATIONS

	Linton 2	**Glendale 3**	**Dovedale 3**
Maximum Input	20 Watts DIN	30 Watts DIN	50 Watts DIN
Impedance	6 Ohms nominal	6 Ohms nominal	6 Ohms nominal
Frequency Response: Maximum Size	55 Hz – 18,000 Hz ± 4dB	45 Hz – 22,000 Hz ± 4dB	35 Hz – 22,000 Hz ± 4dB
Minimum Size	70 Hz – 18,000 Hz ± 4dB	50 Hz – 22,000 Hz ± 4dB	40 Hz – 22,000 Hz ± 4dB
Bass Speaker	200 mm (8″) diameter	250 mm (10″) diameter	300 mm (12″) diameter
Mid Range Speaker	—	100 mm (4″) diameter	130 mm (5″) diameter
Mid Range Treble Speaker	50 mm (2″) diameter		
Treble Speaker	—	30 mm (1″) diameter	25 mm (1″) diameter
Crossover Frequencies	1,200 Hz	800 Hz and 5,000 Hz	600 Hz and 5,000 Hz
Enclosure Type	Acoustic Suspension	Acoustic Suspension	Acoustic Suspension
Maximum Size	H. 533 mm x W. 299 mm x D. 241 mm (21″ x 11¾″ x 9½″)	H. 610 mm x W. 356 mm x D. 305 mm (24″ x 14″ x 12″)	H. 743 mm x W. 425 mm x D. 305 mm (29¼″ x 16¾″ x 11¾″)
Internal Volume	37.5 litres (1.3 cu. ft.)	66 litres (2.3 cu. ft.)	90 litres (3.2 cu. ft.)
Minimum Size	H. 355 mm x W. 248 mm x D. 222 mm (14″ x 9¾″ x 8¾″)	H. 565 mm x W. 305 mm x D. 267 mm (22¼″ x 12″ x 10½″)	H. 610 mm x W. 356 mm x D. 305 mm (24″ x 14″ x 12″)
Internal Volume	20 litres (0.7 cu. ft.)	46 litres (1.6 cu. ft.)	66 litres (2.3 cu. ft.)

Orbital Mountings by Hi-Fi Aids

Loudspeaker manufacturers and recognised authorities on sound reproduction have consistently recommended the elevated positioning of speaker enclosures. Hi-Fi Aids have come up with the answer.

A comprehensive range of multi-positionable wall mounting units that will bring out the best in your equipment. Directionally adjustable at a touch, introducing audio focus to suit your seating arrangements. Out of reach of prying fingers and over enthusiastic carpet sweepers!

Superbly engineered in cast aluminium and steel with durable black finish to blend with modern decor. Available in nine types to suit speakers to a weight limit of 50 lbs.
N.B. – Fittings for wall and speaker are supplied in all cases.

MODEL OMS 001

Universal mounting, single vertical axis 10″ to centre. Speaker held in position by 2 rubber faced alloy discs. No screws needed. Tension adjustable.

MODEL OMS 002

Concealed mounting single vertical axis. Speaker held by variable slot attachment. Adjusts up to 8″ slot centres. Ideal mounting for Bang and Olufsen.

MODEL OMS 002A (not shown)

Fixed single slot attachment model. Ideal mounting for Sony.

MODEL OMS 003

Concealed mounting. Single vertical axis. Rawlnuts (supplied) or screw attachment to speaker at 5″ centres. Also available as 8″ fixings as **MODEL OMS 003A (not shown)**

MODEL OMS 004

Concealed mounting. Dual vertical and horizontal axis. Rawlnuts (supplied) or screw attachment to speaker at 5″ centres.
Also available as 8″ fixings as **MODEL OMS 004A (not shown)**

MODEL OMS 005L

Concealed mounting. 90° single vertical axis, reversible for left and right hand speakers. Screw attachment. Suitable for speakers not exceeding 10 lbs in weight.

MODEL OMS 006L

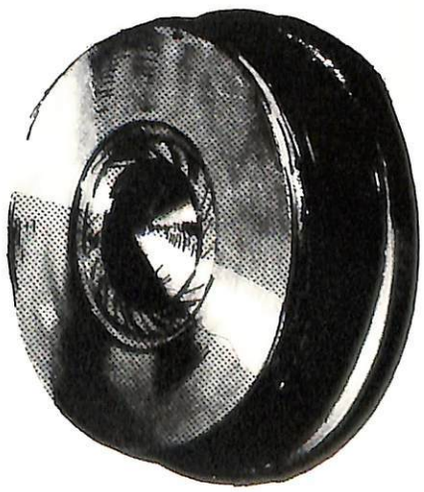
Universal mounting, single vertical axis, $6\frac{1}{2}$″ to centre. Speaker held in position by 2 rubber faced pressed steel pads. No screws needed. Tension adjustable. Suitable for speakers not exceeding 15 lbs in weight.

STC

TYPE STC4001G SUPER TWEETER

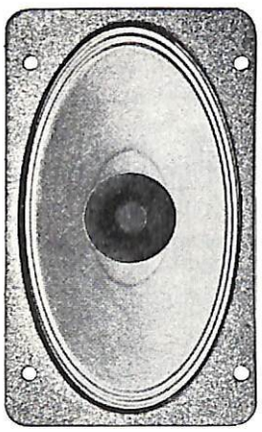
The design of this Unit is based on techniques used in production of high quality Dynamic Studio Microphones and manufactured to the same high standards. The result is a Tweeter with excellent transient response, and virtually omni-directional properties over a wide frequency range.

A simple dividing net-work, such as a 1 uF Capacitor in series can be quite effective but it is recommended that a crossover Unit is employed in the speaker system which brings the Tweeter into action at around 6 Kc/s and cuts off at 25 Kc/s.



EMI

Type 150
Frequency 50–11000 Hz.
Impedance 3, 8 or 15 ohm.
Dual cone.
16 watts peak (use with amplifier of 8 watts RMS per channel).
Also available less tweeter cone 3, 8 or 15 ohm.
Size 345 mm × 206 mm (13·59″ × 8·096″).



Type 99140
Impedance 4, 8 and 15 ohms.
Voice coil diameter ¾″.
3 watts RMS.
200 mm × 125 mm (8″ × 5″).

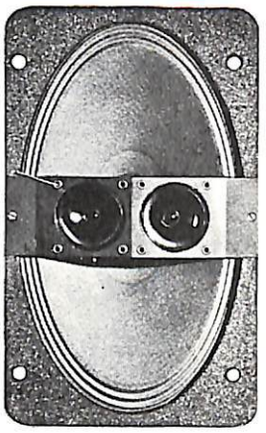
Type 99140 EB
Impedance 8 ohm.
Dual cone, roll surround.
Size 200 mm × 125 mm (8″ × 5″).
Power handling: 10 watts RMS.

Type 98132
Impedance 8 ohm.
Voice coil diameter ¾″.
6 watts RMS.
5″ round (125 mm).

Type 97492AT
2¼″ tweeter.
Impedance 8 ohm.
Voice coil diameter 1″.

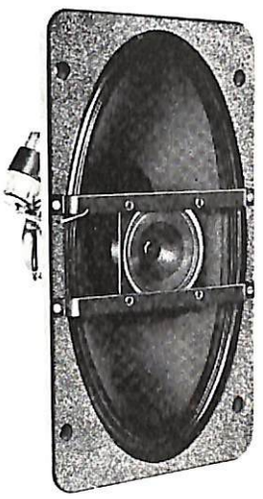
Type 450
Frequency 55–13000 Hz.
Impedance 3, 8 or 15 ohm.
Twin tweeter with built in crossover (5000 Hz).
16 watts peak (use with amplifier of 8 watts RMS per channel).
Size 345 mm × 206 mm (13·59″ × 8·096″).

Type 92390 FN
Impedance 4 ohm as type 450 but single tweeter.



Type 350
Frequency 20–20000 Hz.
Impedance 8 ohm.
Built crossover (5000 Hz), 30 watts peak (use with amplifier of 15 watts per channel).
Size 345 mm × 206 mm (13·59″ × 8·096″).

Type 92390GK
As type 350, but bass unit only without tweeter.



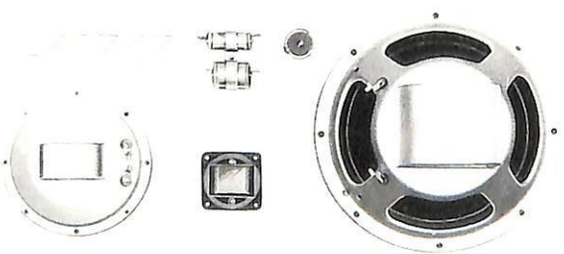
Type 93850
Impedance 4, 8 or 16 ohm.
Voice coil diameter 1″.
10 watts RMS.
6½″ round (163 mm).

Peerless

All Peerless speaker kit systems easily conform to the DIN45500 standard and ensure genuine High Fidelity sound reproduction.

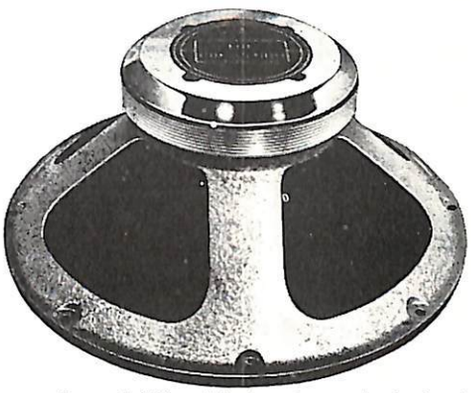
Peerless KIT 3-15

A 3 speaker kit system for 1·06 cu. ft. (30 litres) cabinet. Approx. 9⅞″ x 21½″ x 12″. Max. Power Input: 15 watts. Frequency Range: 45-18,000 Hz. Cross-over Frequencies: 750 & 4,000 Hz. Woofer: 8″ diam. (special impregnated paper surround) type P 825 W, free air resonance approx. 45 Hz, 90,000 Maxwells. Midrange: 5″ diam. type GT50 MRC, closed back, 21,500 Maxwells. Tweeter: 2″ diam. type MT 20 HFC, closed back, 12,000 Maxwells. Delivered with components for dividing network and drawing for 30 litre cabinet.



FANE acoustics LIMITED

CRESCENDO '18'



Cabinet volume 7,000 cubic ins. for a single loudspeaker

An ultra high power, high sensitivity 18" unit with a wide frequency response for this size of speaker.

Eminently suitable for all bass instruments.

Gauss (Flux Density)	20,000 lines
Impedance	8 or 15 ohms
Frequency Response	30 — 5,000 Hz.
Bass Resonance	45 Hz.
Voice Coil Diameter	3 ins.
Power Rating	150 watts R.M.S. cont.

CRESCENDO '15'

Cabinet volume 4,500 cubic ins. for a single loudspeaker

A super sensitive, full frequency range, 15" high power unit. Suitable for use singly or in multiples, for Bass Guitar, Electronic Organ, Lead and Rhythm Guitar, Vocalists, etc., etc.

Gauss (Flux Density)	20,000 lines
Impedance	8 or 15 ohms.
Frequency Response	30 —13,000 Hz.
Bass Resonance	50 Hz.
Voice Coil Diameter	2 ins.
Power Rating	100 watts R.M.S. cont.

CRESCENDO '12'

Cabinet volume 3,200 cubic ins. for a single loudspeaker

An exceptionally sensitive 12" high power unit available in two versions. Type 'A' for general purposes to be used either singly or in multiples. And Type 'B/L' which has a plastic treated linen surround to be used in pairs (min.) for Bass Guitar or Electronic Organ.

	Type 'A'	Type 'B/L'
Power Rating — R.M.S. continuous	100 watts	100 watts
Gauss (Flux Density)	20,000 lines	20,000 lines
Impedance	8 or 15 ohms.	8 or 15 ohms
Frequency Response	30 — 16,000 Hz.	40—10,000 Hz.
Bass Resonance	70 Hz.	70 Hz.
Voice Coil Diameter	2 ins.	2 ins.

"WHAT IS THE SIGNIFICANCE OF 'GAUSS' ?"

When an amplifier is connected to a loudspeaker, generally, for a given power input — THE HIGHER THE GAUSS (Flux Density) } With same diam.
THE HIGHER THE SOUND OUTPUT } of pole piece

Normally, loudspeakers used for Public Address, Musical Instruments and Vocal amplification, have magnets providing flux densities of 10,000 to 17,000 lines. IT SHOULD BE NOTED THAT OUR 'CRESCENDO' MODELS HAVE AN EXCEPTIONAL FLUX DENSITY OF 20,000 LINES. As an increase of only 1,000 lines results in noticeably louder sound output, the efficiency of the 'CRESCENDO' types is considerably higher than even our very efficient 17,000 line models. Other audible advantages of higher flux densities are increased definition, 'attack' and brighter sound due to the effect on the upper frequency range.

IMPORTANT

Where more than one loudspeaker is used in a cabinet they can be wired in series or parallel or series/parallel to obtain the required resultant impedance matching. POLARITY MUST BE OBSERVED. i.e. For parallel connections terminals indicated by red dot should be joined together and for series, the terminal marked red on one speaker should be connected to the plain terminal at the next speaker.

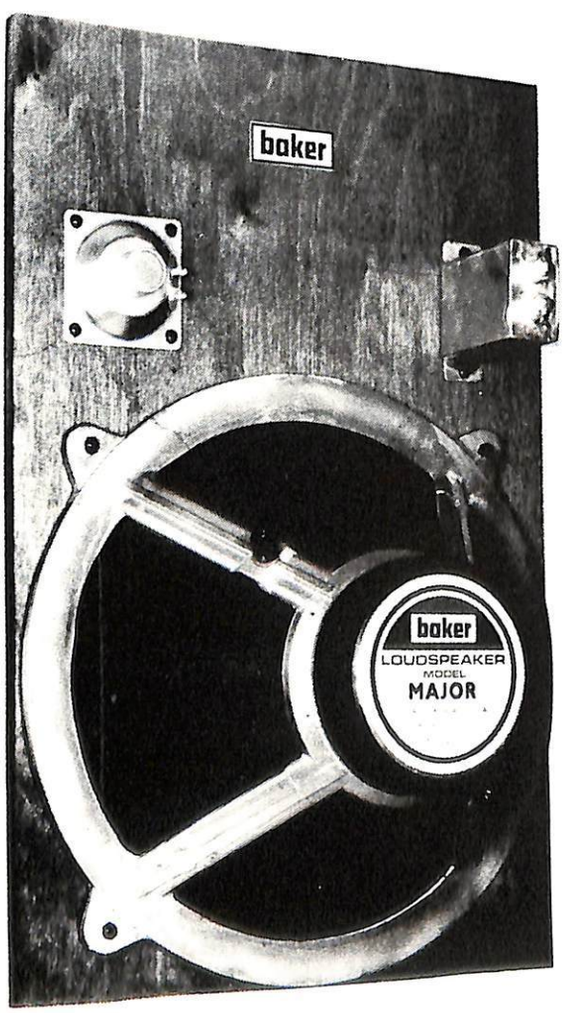
WILMSLOW AUDIO ECONOMY RANGE

INEXPENSIVE LOUDSPEAKERS FOR RADIO CONSTRUCTORS, FOR SERVICE REPLACEMENTS IN RADIOS, TAPE RECORDERS, RADIOGRAMS, etc., FOR INTERCOMS and PAGING SYSTEMS, etc.

All Guaranteed Brand New and Perfect and Fully Guaranteed.

Type No.	Size	Impedance	Type No.	Size	Impedance
E225/75	2¼" Round	75 ohms	E85/3	8"×5" Ellip.	3 ohms
E25/56	2½" ,,	56 ,,	E85/8	8"×5" ,,	8 ,,
E25/8	2½" ,,	8 ,,	E85/15	8"×5" Ellip.	15 ,,
E/70/8	70 mm	8 ,,	E10/8	10" Round	8 ,,
E70/80	70 mm ,,	80 ,,	E10/15	10" ,,	15 ,,
E5275/3	5"×2¾" Ellip.	3 ,,	E5/3	5" Round	3 ,,
E5275/8	5"×2¾" ,,	8 ,,	E5/8	5" ,,	8 ,,
E5275/15	5"×2¾" ,,	15 ,,	E65/4	6½" ,,	4 ,,
E64/3	6"×4" ,,	3 ,,	E65/8	6½" ,,	8 ,,
E64/8	6"×4" ,,	8 ,,	E8/3	8" ,,	3 ,,
E64/15	6"×4" ,,	15 ,,	E8/8	8" ,,	8 ,,
E73625/3	7"×3⅝" ,,	3 ,,	E8/15	8" ,,	15 ,,
E73625/8	7"×3⅝" ,,	8 ,,	E106/3	10"×6"	3 ,,
E73625/15	7"×3⅝" ,,	15 ,,	E106/8	10"×6" ,,	8 ,,
E74/3	7"×4" ,,	3 ,,	E106/15	10"×6" ,,	15 ,,
E74/8	7"×4" ,,	8 ,,	E12/3	12" Round	3 ,,
E74/15	7"×4" ,,	15 ,,	E12/15	12" ,,	15 ,,
E8275/3	8"×2¾" ,,	3 ,,			

baker



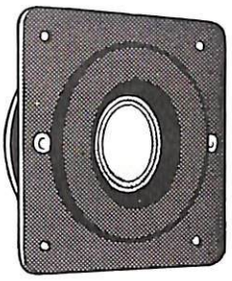
The Baker 'Major Module'

Comprising a 12" Baker 'Major' loudspeaker and a high efficiency tweeter, mounted on a wooden baffle, size 19"×12½" ready for housing in any convenient enclosure or conversion of existing cabinets, furniture, etc.

Its use is not limited to home hi-fi, it has a maximum power rating of 20 watts and is therefore ideal for theatres, halls, schools, discotheques, etc.

The 12" 'Major' Module is of the high standard associated with Baker Loudspeakers, having a bass resonance of 40 cps., and overall response of 30–17,000 cps.
Available with 3, 8 or 15 ohm voice coils.

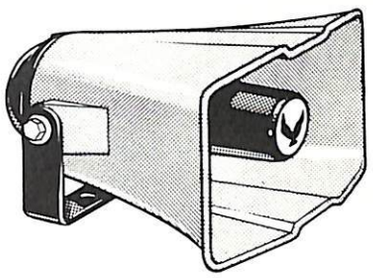
Eagle



FF 27 Dome tweeter

The main advantage of dome tweeters is their very wide dispersion or polar angle. The FF 27 unit combines this with a high power handling capability making it suited for use in speaker systems of the highest grade. Like all Eagle tweeters the unit has a sealed back for correct acoustic loading.

Frequency range: 2,000–20,000 Hz. **Crossover frequency:** 3,000 Hz. **Flux density:** 10,000 gauss. **Impedance:** 8 ohms. **Mounting hole:** 65 mm. Suitable for systems up to 30 watts RMS.

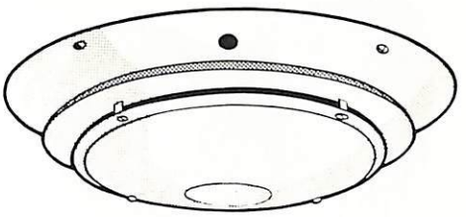


HDB 8 and HDB 12 PA Speakers

Two rectangular units in the extensive Eagle range of PA speakers, finished in tough, lightweight ABS, their low profiles make them ideal for wall, stand, ceiling or vehicle mounting.

HDB 8 Power handling: 20 watts continuous rating. **Frequency range:** 350–13,000 Hz. **Dispersion angle:** 110° × 60°. **Impedance:** 8 ohms. **Dimensions:** 216 × 210 × 140 mm.

HDB 12 Power handling: 30 watts continuous rating. **Frequency range:** 250–13,000 Hz. **Dispersion angle:** 110° × 60°. **Impedance:** 8 ohms. **Dimensions:** 315 × 300 × 160 mm.



FF 22 Ceiling speaker

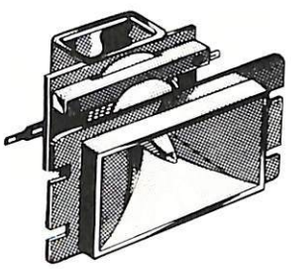
A surface mounting metal ceiling unit which uses an inverted magnet speaker to achieve a really low profile of only 70 mm. The surface mounting system ensures minimum installation problems making the FF 22 equally suited to new or existing architecture. A 165 mm diameter speaker is used for a high standard of clarity and definition.

Power handling: 8 watts continuous rating. **Frequency range:** 60–14,000 Hz. **Impedance:** 8 ohms. **Dimensions:** 235 – 50 mm.

HDA 5 7.5 watt PA Speaker

Finished in tough ABS the HDA 5 provides excellent response and output for its compact size. Easily set up in minutes to provide paging, sound reinforcement or a good garden extension unit.

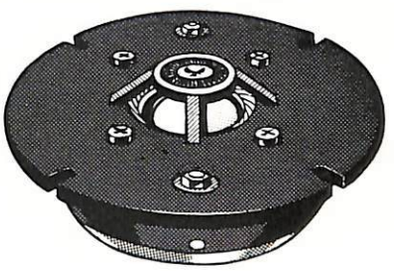
Power handling: 7.5 watts continuous rating. **Frequency range:** 450–12,000 Hz. **Dispersion angle:** 120°. **Impedance:** 8 ohms. **Dimensions:** 150 × 134 mm.



HT 21 Horn tweeter

The HT 21 is a 20 watt professional quality horn tweeter using a special centre stabiliser to improve both the horn loading and overall efficiency. The flared output shape ensures a smooth response with no harsh peaks.

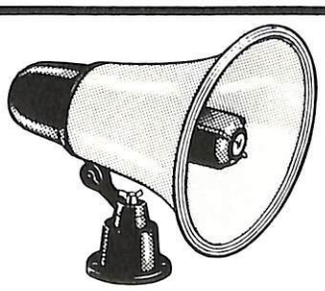
Frequency range: 2,500–20,000 Hz. **Crossover frequency:** 3,000 Hz. **Flux density:** 14,000 gauss. **Impedance:** 8 ohms. **Mounting hole:** 63 – 43 mm. Suitable for systems up to 40 watts RMS.



DT 33 Dome tweeter

A heavy duty horn tweeter which will handle up to 30 watts. The front mounting dome design gives a very wide listening angle with little fall off at the edges of the polar pattern.

Frequency range: 2,000–18,000 Hz. **Crossover frequency:** 3,000 Hz. **Flux density:** 14,000 gauss. **Impedance:** 8 ohms. **Mounting hole:** 72 mm. Suitable for systems up to 40 watts RMS.



HDA 15T and HDA 30T PA speakers

Both the HDA 15T and HDA 30T have built-in totally enclosed multi-tap transformers so that just by rotating the 4-way locking input plug the unit can be exactly matched in seconds. Supplied complete with connecting cable and plug.

HDA 15T Power handling: Tapped 100 volt line – 15, 7.5, 3.5 and 2 watts continuous rating. **Frequency range:** 300–13,000 Hz. **Dispersion angle:** 110°. **Impedance:** 8 ohms. **Dimensions:** 280 – 216 mm.

HDA 30T Power handling: Tapped 100 volt line – 30, 15, 7.5 and 4.5 watts continuous rating. **Frequency range:** 250–13,000 Hz. **Dispersion angle:** 105°. **Impedance:** 8 ohms. **Dimensions:** 304 – 254 mm.

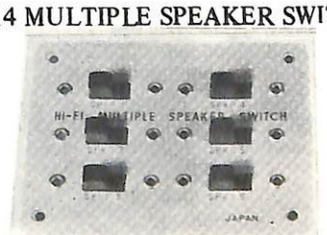
HDA 6 and HDA 10 PA speakers

Built on the immense success of models like the HDB 8, this range is the logical development of a design concept that builds quality into the product. Rugged and weatherproof, all finishes are stove enamelled and cadmium plated. The HDA 10 is as the HDA 6 but with greater power handling, frequency range and size.

HDA 6 Power handling: 15 watts continuous rating. **Frequency range:** 350–13,000 Hz. **Dispersion angle:** 115°. **Impedance:** 8 ohms. **Dimensions:** 204 × 166 mm.

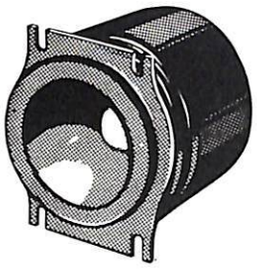
HDA 10 Power handling: 30 watts continuous rating. **Frequency range:** 250–13,000 Hz. **Dispersion angle:** 105°. **Impedance:** 8 ohms. **Dimensions:** 230 × 260mm.

E. 1014 MULTIPLE SPEAKER SWITCH



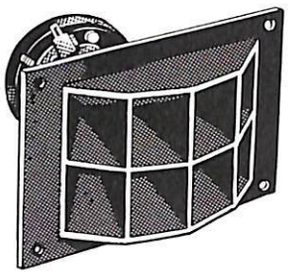
E. 1013 SPEAKER SELECTION SWITCH

Eagle



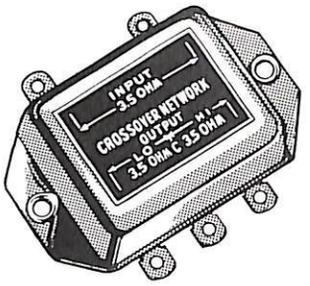
HT 15 Horn tweeter
A reliable tweeter that has sold well over the years. Almost identical in performance to the MHT 10 – and very attractive in price.

Frequency range: 2,000–18,000 Hz. **Crossover frequency**: 3,000 Hz. **Flux density**: 13,000 gauss. **Impedance**: 16 ohms. **Mounting hole**: 54 mm. Suitable for systems up to 30 watts RMS.



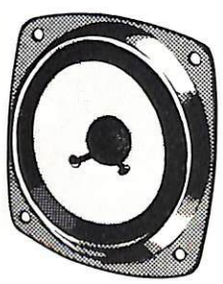
FF 28 Horn tweeter
The FF 28 uses a multi-cellular horn assembly which gives it a very high efficiency ratio. This makes the unit ideal for medium to low power speaker systems where a good conversion factor can make all the difference. The multi-cellular horn assembly is specially reinforced to eliminate any unwanted resonances.

Frequency range: 3,000–20,000 Hz. **Crossover frequency**: 3,000 Hz. **Flux density**: 10,000 gauss. **Impedance**: 8 ohms. **Mounting hole**: 89 · 61 mm. Suitable for systems up to 20 watts RMS.



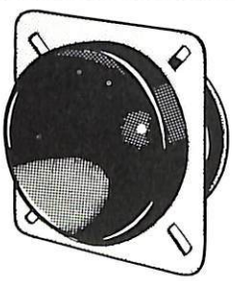
CN 23/28/216 Crossover networks
These compact 2-way crossover networks channel high and low frequencies to proper speakers – high to tweeters and low to bass unit. They are supplied complete with full installation instructions.

CN 23–3 ohms. **CN 28**–8 ohms. **CN 216**–16 ohms. **Crossover frequency**: 3,000 Hz. **Components**: L & C. Suitable for systems up to 15 watts RMS.



CT 5 Cone tweeter
This 78 mm high-frequency unit uses a foam-mounted cone for controlled response. The CT 5 offers high performance at an attractively low price, in fact an ideal unit for any medium power system.

Frequency range: 3,000–15,000 Hz. **Crossover frequency**: 3,000 Hz. **Flux density**: 9,000 gauss. **Impedance**: 8 ohms. **Mounting hole**: 94 mm. Suitable for systems up to 10 watts RMS.

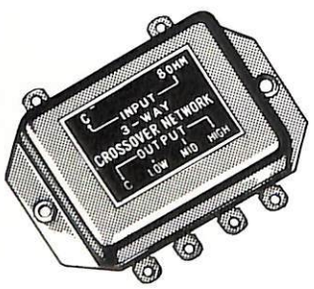


MHT 10 Horn tweeter
A well established unit that is now widely used by both manufacturers and the private user. It is a high efficiency horn tweeter using a powerful ceramic magnet assembly. An integral diffuser ensures a wide polar pattern.

Frequency range: 2,000–18,000 Hz. **Crossover frequency**: 3,000 Hz. **Flux density**: 13,000 gauss. **Impedance**: 8 ohms. **Mounting hole**: 54 mm. Suitable for systems up to 30 watts RMS.

FF 30 3-way Speaker network
The FF 30 uses a comprehensive L-C network to split out and separate bass, middle and high frequency ranges. In addition, the midrange and high frequency channels incorporate variable attenuators which allow adjustment for individual speakers and room acoustics. The network and controls are mounted on a heavy gauge panel which carries spring loaded colour coded connection terminals.

Impedance: 8 ohms. **Crossover frequencies**: 1,000 and 5,000 Hz. **Components**: L, C and variable R. Suitable for systems up to 25 watts RMS.



FF 5 3-way Crossover network
A completely self-contained 3-way crossover network designed to route high, midrange and low frequencies to appropriate speakers. Recommended for use with any 3-way combination of the Eagle chassis unit range. Supplied complete with full installation instructions.

Impedance: 8 ohms. **Crossover frequencies**: 1,000 and 5,000 Hz. **Components**: L & C. Suitable for systems up to 25 watts RMS.

SN 75 2-way Speaker network
Crossing over via an L-C network, the SN 75 is fitted with an adjustable high frequency control which pre-determines the tweeter loading. As well as the adjustable control and crossover network a heavy gauge metal panel carries spring loaded terminals for quick and reliable connection of the finished speaker system.

Impedance: 8 ohms. **Crossover frequency**: 3,000 Hz. Suitable for systems up to 15 watts RMS.

CT 10/8 and CT 10/16
The operating system is of the pressure unit type, utilising a spun aluminium diaphragm driven by an aluminium wire-wound voice coil operating in a magnetic gap of high-flux density. Gives clean crisp sound of unsurpassed clarity.

CT 10/8 Frequency range: 1,500–16,000 Hz. **Crossover frequency**: 3,000 Hz. **Flux density**: 10,000 gauss. **Impedance**: 8 ohms. **Mounting hole**: 80 mm. Suitable for systems up to 20 watts RMS.

CT 10/16 Frequency range: 1,500–16,000 Hz. **Crossover frequency**: 3,000 Hz. **Flux density**: 10,000 gauss. **Impedance**: 16 ohms. **Mounting hole**: 80 mm. Suitable for systems up to 20 watts RMS.

Eagle

FF 25 Midrange speaker
Like the FF 24 the FF 25 is a dome type midrange unit but with a power handling capacity which makes it suitable for use in any speaker system including the largest. A high gauss magnet assembly assures excellent damping and transient response.

Dimensions: 110 · 110 mm (3.5 · 3.5 inches). **Power handling:** 30 watts RMS. **Frequency range:** 700–10,000 Hz. **Flux density:** 9,200 gauss. **Recommended crossover frequencies:** 1,000 and 5,000 Hz. **Impedance:** 8 ohms. **Baffle opening:** 88 mm.

FR 10 Dual concentric speaker
The FR 10 consists of a 255 mm high compliance bass driver and a 25 mm dome tweeter which is fed via a dividing network, thus gaining maximum efficiency from each section. The FR 10.is the ideal full range speaker for the larger system. Supplied complete with full cabinet drawings and specifications.

Diameter: Bass unit 255 mm (10 inches), Tweeter: 25 mm (1 inch). **Power handling:** 25 watts RMS. **Frequency range:** 25–20,000 Hz. **Flux density:** Woofer: 12,000 gauss, Tweeter: 11,000 gauss. **Baffle opening:** 230 mm. **Impedance:** 8 ohms.

AA 12 Midrange speaker
Specially designed for the perfect reproduction of frequencies between 800 and 8,000 Hz, this speaker is the ideal partner for any efficient combination of bass speaker and tweeter unit, such as the FR 8 and FF 27. It is fully sealed for correct acoustic loading and uses a powerful ceramic magnet for maximum efficiency.

Diameter: 127 mm (5 inches). **Power handling:** 15 watts RMS. **Frequency range:** 800–8,000 Hz. **Flux density:** 9,000 gauss. **Recommended crossover frequencies:** 1,000 and 5,000 Hz. **Impedance:** 8 ohms. **Baffle opening:** 110 mm.

FR 4 Speaker
This is a full-range high compliance speaker ideal for the building of a high performance yet compact enclosure. Excellent results can be obtained at the lowest possible price . . . plus the satisfaction of building your own cabinets to match existing decor. Supplied complete with full cabinet drawings and specifications.

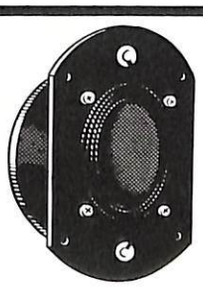
Diameter: 100 mm (4 inches). **Power handling:** 5 watts RMS. **Frequency range:** 40–16,000 Hz. **Flux density:** 10,000 gauss. **Impedance:** 8 ohms. **Baffle opening:** 140 mm.

FR 8 Speaker
Due to its very wide frequency coverage the FR 8 is the ideal full range drive unit. Because of a very smooth low frequency response it is equally suited for use as the bass unit in a system incorporating, for example, the AA 12 midrange and MHT 10 tweeter units as described in the booklet accompanying the FR 8.

Diameter: 200 mm (8 inches). **Power handling:** 15 watts RMS. **Frequency range:** 30–17,000 Hz. **Flux density:** 12,000 gauss. **Impedance:** 8 ohms. **Baffle opening:** 165 mm.

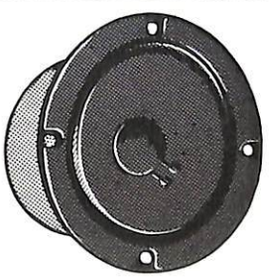
FR 65 Speaker
Having 10 watts RMS power handling the FR 65 features a powerful ceramic magnet developing 11,000 gauss. An integral parasitic tweeter extends high frequency response for crisp treble reproduction. Supplied complete with full cabinet drawings and specifications.

Diameter: 165 mm (6.5 inches). **Power handling:** 10 watts RMS. **Frequency range:** 35–17,000 Hz. **Flux density:** 11,000 gauss. **Impedance:** 8 ohms. **Baffle opening:** 140 mm.



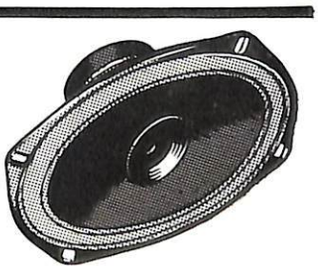
FF 24 Midrange speaker
In recent years more attention has been paid to midrange frequencies in speaker systems. Experiments have shown that the addition of a midrange unit to an existing 2-way system can bring about a dramatic quality change. The FF 24 is a dome type unit which is capable of a wide range of use even in relatively high power systems.

Dimensions: 140 · 110 mm (5.5 · 3.5 inches). **Power handling:** 20 watts RMS. **Frequency range:** 400–9,000 Hz. **Flux density:** 10,000 gauss. **Recommended crossover frequencies:** 1,000 and 5,000 Hz. **Impedance:** 8 ohms. **Baffle opening:** 95 mm.



FF 26 Midrange speaker
The FF 26 midrange speaker unit is similar to the AA 12 but has a larger cone and magnet assembly to give greater power handling capacity. Like all Eagle midrange units it must be used with a good quality 3-way crossover network.

Diameter: 142 mm (5.5 inches). **Power handling:** 20 watts RMS. **Frequency range:** 300–5,000 Hz. **Flux density:** 10,300 gauss. **Recommended crossover frequencies:** 1,000 and 5,000 Hz. **Impedance:** 8 ohms. **Baffle opening:** 115 mm.

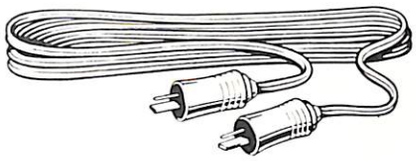


FF 23 Elliptical speaker
Elliptical speaker units are ideal where a slim enclosure is required since they allow the constructor to build a compact system which maintains maximum cone area. Like the FR 65 and FR 8 a parasitic tweeter is fitted which allows the FF 23 to be used as a full range unit or as the bass/midrange driver in a two or three speaker system.

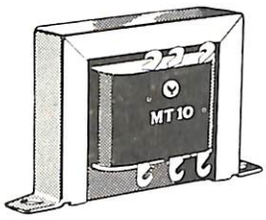
Dimensions: 230 · 150 mm (9 · 6 inches). **Power handling:** 15 watts RMS. **Frequency range:** 35–16,000 Hz. **Flux density:** 11,500 gauss. **Impedance:** 8 ohms. **Baffle opening:** 210 · 140 mm.

Loudspeaker accessories

Metal $\frac{1}{4}$" Jack Plug

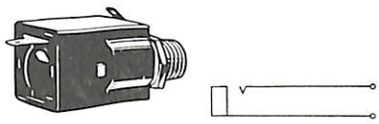


RE 69 DIN Speaker/Plug
DIN Speaker Plug
10 Metres.

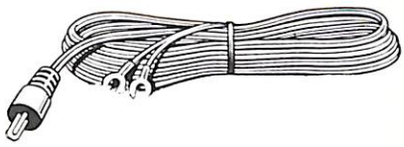


MT 10/MT 15/MT 20 100 volt Line matching transformers
A range of 100 volt line matching transformers with secondarys tapped 8 and 16 ohms, primarys as follows:

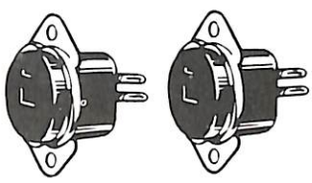
MT10 Continuous rating (watts): 10. **Taps (watts):** 0.625, 1.25, 2.5, 5 and 10. **Slotted fixing centres:** 60 mm.
MT 15 Continuous rating (watts): 15. **Taps (watts):** 1.25, 2.5, 5, 10 and 15. **Slotted fixing centres:** 62 mm.
MT 20 Continuous rating (watts): 20. **Taps (watts):** 2.5, 5, 10, 15 and 20. **Slotted fixing centres:** 68 mm.



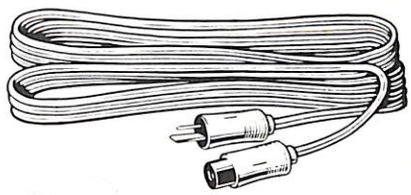
Open $\frac{1}{4}$" Jack Socket



RE 68 DIN Speaker Plug–
Spade Terminals
4·5 Metres



DIN Chassis Sockets

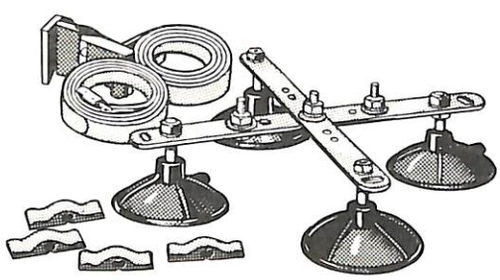


RE 70 DIN Speaker/Plug/
DIN Speaker Socket
10 Metres

Screw Terminal Strips
(For use with RE 68 Lead)

DIN Line Sockets

DIN Loudspeaker Plugs



CAR 45 Vehicle speaker mounting bracket
The CAR 45 allows temporary fixing of any horn loudspeaker to a vehicle roof. No drilling is required, rubber suction pads hold the unit secure while protecting paintwork. Retaining straps clip under the vehicle roof drainage gulleys to ensure stability when mobile.

Dimensions: 270 × 270 × 40 mm.

It is common practice in professional circles to raise loudspeakers slightly above floor level to improve performance.
The AA 44's are suitable for all the larger Eagle speakers, equally they will enhance the performance of any floor standing units as well as improving proportional dimensions. Complete with fixing screws and template.

Height: 305 mm. **Platform:** 127 mm. **Base extension:** 247 mm.

Richmond Press Ltd., Wilmslow, Cheshire, England

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